



POINT LOMA OCEAN OUTFALL MONTHLY RECEIVING WATERS MONITORING REPORT

POINT LOMA WASTEWATER TREATMENT PLANT

NPDES Permit No. CA0107409
SDRWQCB Order No. R9-2017-0007

OCTOBER 2024

Environmental Monitoring and Technical Services
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November 30, 2024

Mr. David W. Gibson, Executive Officer
California Regional Water Quality Control Board
San Diego Region
2375 Northside Drive, Suite 100
San Diego, CA 92108

Attention: POTW Compliance Unit

Dear Mr. Gibson:

Enclosed is the October 2024 Monthly Receiving Waters Monitoring Report for the Point Loma Ocean Outfall, Point Loma Wastewater Treatment Plant as required per Order No. R9-2017-0007, NPDES Permit No. CA0107409.

This report includes raw ocean monitoring data and summaries of water quality parameters and ocean conditions measured during the month for the Point Loma outfall region. Also included are summaries of compliance with the bacterial water-contact standards specified in the California Ocean Plan.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,



Peter S. Vroom, Ph. D.
Deputy Director, Public Utilities Department

PV/rk

cc: U.S. Environmental Protection Agency, Region 9

INTRODUCTION

Monthly reports of water quality and ocean conditions for the San Diego coastal region surrounding the Point Loma Ocean Outfall are submitted to the San Diego Regional Water Quality Control Board and U.S. EPA Region 9 in accordance with Order No. R9-2017-0007, NPDES Permit No. CA0107409 for the Point Loma Wastewater Treatment Plant (PLWTP), Point Loma Ocean Outfall (PLOO). This report includes receiving waters monitoring data collected from all shore, kelp and offshore stations specified in the above order. Data for influent and effluent monitoring activities for the PLWTP are presented in separate reports.

MATERIALS AND METHODS

Shore Stations

Water quality conditions are required to be monitored at eight shoreline stations, including D4, D5, D7, D8, D9, D10, D11 and D12, which range from the tip of the Point Loma Peninsula to west of Mission Bay (see station locations map). Over the past several years, due to increasing instability in several cliffside areas of Point Loma, City staff have been unable to safely access and sample several stations at various times. This has resulted in the following modifications:

- Station D8 was replaced by alternate station D8-A during July 2016, which was subsequently replaced by station D8-B in March 2018, after which sampling at station D8-A resumed in December 2020. Due to recent access issues at D8-A, sampling resumed at D8-B during February 2021.

Seawater samples are collected from the surf zone at each station on a weekly basis. These samples are subsequently transported to the City's Marine Microbiology Laboratory and analyzed for the presence of several types of fecal indicator bacteria (FIB), including total coliforms, fecal coliforms, and *Enterococcus*. Visual observations of water color and clarity, surf height, human or animal activity, and weather conditions are also recorded at the time of sample collection. Wind speed and direction are measured using a hand-held anemometer with a compass.

Kelp Bed Stations

The eight kelp stations are sampled weekly according to permit specifications to monitor water quality conditions within the Point Loma kelp forest. These stations include three sites located along the inshore edge of the kelp bed paralleling the 9-m depth contour (i.e., stations C4, C5 and C6), and five sites located near the offshore edge of the kelp bed along the 18-m depth contour (i.e., stations A1, A6, A7, C7 and C8).

Routine weekly monitoring at each of the kelp bed sites consists primarily of collecting seawater samples at discrete depths to determine concentrations of fecal indicator bacteria (i.e., total coliforms, fecal coliforms, and *Enterococcus*). Water column profiles of various physical/chemical parameters are also generated during each sampling event, and visual observations of weather and water conditions are recorded at each station.

Seawater samples at the kelp bed stations are collected using a CTD-integrated rosette sampler with Niskin bottles. Aliquots for bacteriological analyses are drawn from these bottles into sterile sample bottles for processing at the City's Marine Microbiology Laboratory. Water column

profiles of temperature, transmissivity, dissolved oxygen, pH, salinity, density, chlorophyll *a* are generated using a Sea-Bird conductivity, temperature and depth instrument (CTD), which collects these data at a rate of ≥ 4 scans per second. These scans are then internally averaged to create water column profiles with data readings at a rate of one per meter. Additionally, CTD profile data for each water sample depth are presented with the bacteriological data.

Offshore Stations

Offshore water quality sampling is conducted quarterly typically during the months of February, May, August, and November. A total of 36 offshore stations (F01–F36) are sampled during each survey usually over a 3-day period. Three of the stations (F01–F03) are located along the 18 m depth contour, while 11 stations are located along each of the following contours: 60 m (stations F04–F14), 80 m (stations F15–F25), and 98 m (stations F26–F36). Of these 36 stations, 15 (F01–F03, F06–F14, F18–F20) are located within State jurisdictional waters (i.e., within 3 nautical miles of shore) and are subject to the California Ocean Plan’s compliance standards. Monitoring at all offshore sites includes measurements of *Enterococcus* bacteria, water temperature, salinity, density, dissolved oxygen, pH, chlorophyll *a*, transmissivity, chromomorphpic dissolved organic matter (CDOM), and visual observations of weather and water conditions.

Seawater samples for bacteriological analyses at the offshore stations are collected using a CTD-integrated rosette sampler with Niskin bottles. Profiles of the various physical/chemical parameters (listed above) are taken using a Sea-Bird CTD. Additionally, data for depths closest to those at which bacteriological samples were collected are extracted from the CTD profiles and presented with the bacteriological data.

Bacteriological Reporting and Quality Assurance

Estimated values for bacteriological analyses are denoted by greater than (>), less than (<), or estimated (e) qualifiers and result from plates with colony counts above or below the permissible counting limits established in Bordner et al. (1978)¹. This document defines membrane filtration limits of 20–80 colonies per plate for total coliforms and 20–60 colonies per plate for fecal coliforms and *Enterococcus*. No Data (ND) is reported if plate counts from all dilutions have a total colony count of >200 per plate.

Results of the bacteriological analysis of seawater samples collected from each of the shore, kelp bed, and offshore stations located within State waters are assessed relative to the geometric mean and single sample maximum water-contact standards specified in the California Ocean Plan. The seven standards are defined as follows:

30-day Geometric Mean: The following standards are based on the geometric mean of the five most recent samples from each site.

- (1) Total coliform density shall not exceed 1000 CFU/100 mL;
- (2) Fecal coliform density shall not exceed 200 CFU/100 mL;
- (3) *Enterococcus* density shall not exceed 35 CFU/100 mL

Single Sample Maximums:

¹ Bordner, R., J. Winter, and P. Scarpino (eds.). (1978). Microbiological Methods for Monitoring the Environment: Water and Wastes, EPA Research and Development, EPA-600/8-78-017. 337 p.

- (1) Total coliform density shall not exceed 10,000 CFU/100 mL;
- (2) Fecal coliform density shall not exceed 400 CFU/100 mL;
- (3) *Enterococcus* density shall not exceed 104 CFU/100 mL;
- (4) Total coliform density shall not exceed 1,000 CFU/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.

Quality controls of bacteriological data include laboratory and field duplicate analyses. Laboratory duplicates are performed on approximately 10% of the water quality samples, while field duplicates are performed six times a month (see Appendix A). Laboratory duplicates represent two aliquots of the original sample that are split in the laboratory and analyzed by the same analyst using identical procedures within the same analytical run. The results of these analyses provide a measure of intra-analyst precision. In contrast, field duplicates represent two separate samples collected at the same time from the same site, which are handled under identical circumstances and treated the same throughout field and lab procedures. The results of these analyses provide a measure of precision associated with sample collection, preservation, storage, and lab procedures. The sign test (see Gilbert, 1987²) is used to statistically compare both the results from the laboratory duplicates, as well as the results from the field duplicates. These data will be further analyzed in the City's 2024 Quality Assurance Report, which will be completed in March 2025.

SUMMARY OF RESULTS

As of October 2020, new 2019 Ocean Plan Water Quality Objectives are included for *Enterococcus* and total coliforms, see Appendix B.

Shore Stations

- The eight shore stations (D4, D5, D7, D8-B, D9, D10, D11, D12) were sampled on October 2, 9, 16, 23, and 30.
- During the October reporting period, one of the eight shore stations was out of compliance with the various 2015 California Ocean Plan (Ocean Plan) water contact standards on one or more days as follows:
 - o The Single Sample Maximum standard for *Enterococcus* was exceeded at station D10.
- A sewage-like odor was observed at station D5 on one or more days in October.
- Over the years, elevated bacteria levels at shore and kelp bed stations have tended to be associated with rainfall events, heavy recreational use, or the presence of seabirds or decaying kelp and surf grass. See the City of San Diego's most recent Biennial Receiving Waters *Monitoring and Assessment Report for the Point Loma and South Bay Ocean Outfalls* for details (<https://www.sandiego.gov/public-utilities/sustainability/ocean-monitoring/reports>).

Kelp Bed Stations

- The eight kelp bed water quality stations (A1, A6, A7, C4, C5, C6, C7, C8) were sampled on October 8, 15, 21, and 30.

² Gilbert, R.O. (1987). *Statistical Methods for Environmental Pollution Monitoring*. Van Nostrand Reinhold Co., New York.

- During the October reporting period, each of the eight kelp stations was in compliance with the various 2015 California Ocean Plan (Ocean Plan) water contact standards.
- Water column temperatures ranged from 11.68 to 18.24°C. The difference between surface and bottom waters ranged from 1.29 to 5.88°C.
- Chlorophyll *a* concentrations ranged from 0.26 to 9.85 µg/L.
- Nothing of sewage origin was observed at PLOO kelp stations in October.

Offshore Stations

- Quarterly water quality sampling was not conducted during October at the offshore stations. The next quarterly sampling is scheduled for November 2024.



TABLES AND FIGURES

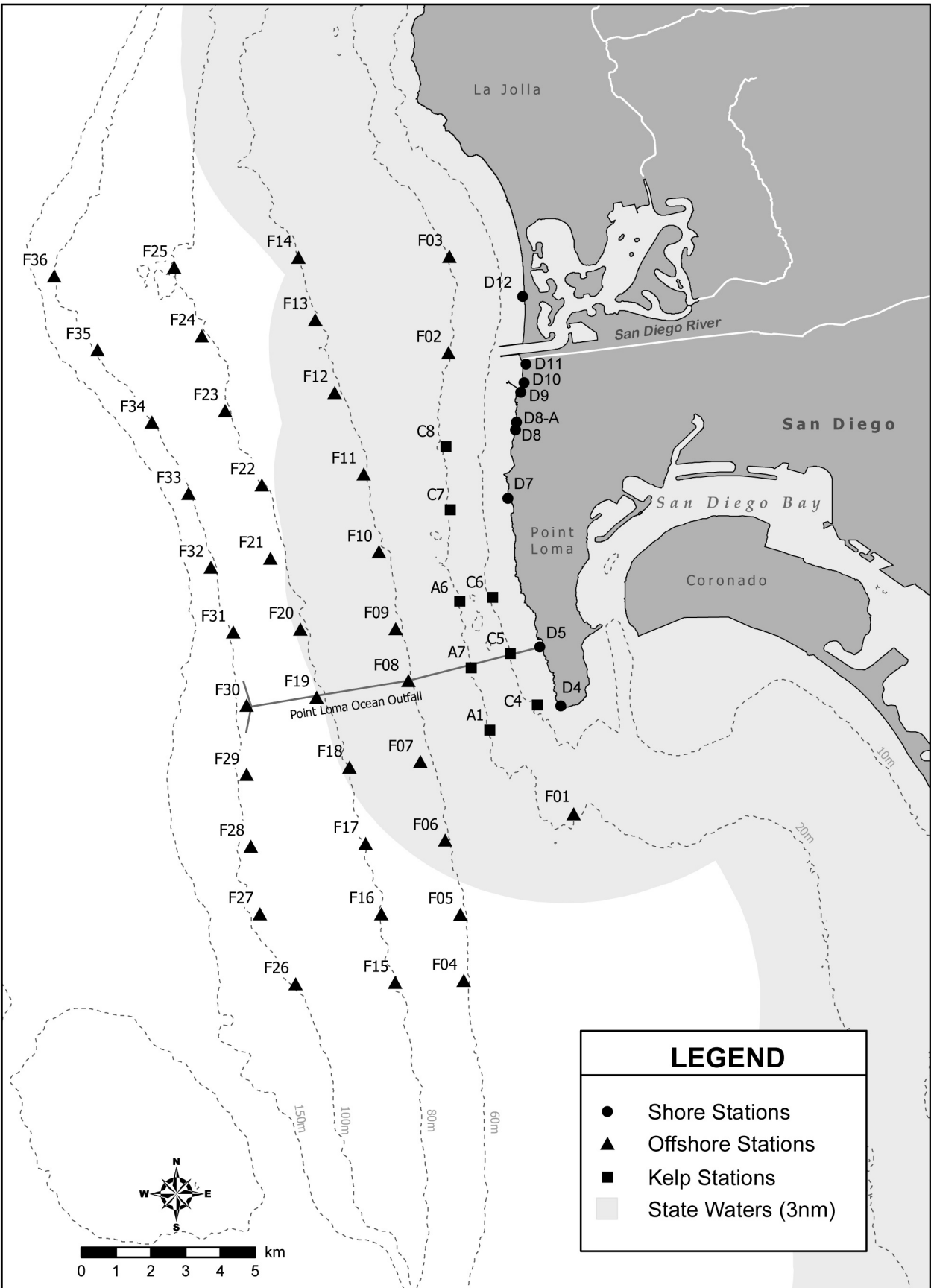


Figure 1.1 Station Map

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Shore Stations

Table 2.1

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for fecal coliform bacteria at the PLOO shore stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 30 days unless otherwise noted (*). Values >200 CFU/100 mL exceed the standard.

Date	D4	D5	D7	D8-B	D9	D10	D11	D12
01 Oct 2024	*2	*4	*2	*8	*3	*4	*6	*5
02 Oct 2024	2	4	3	10	3	4	5	4
03 Oct 2024	2	4	3	10	3	4	5	4
04 Oct 2024	*2	*2	*3	*6	*3	*5	*4	*2
05 Oct 2024	*2	*2	*3	*6	*3	*5	*4	*2
06 Oct 2024	*2	*2	*3	*6	*3	*5	*4	*2
07 Oct 2024	*2	*2	*3	*6	*3	*5	*4	*2
08 Oct 2024	*2	*2	*3	*6	*3	*5	*4	*2
09 Oct 2024	2	2	3	7	3	7	5	2
10 Oct 2024	2	2	3	7	3	7	5	2
11 Oct 2024	*2	*2	*3	*10	*4	*9	*6	*2
12 Oct 2024	*2	*2	*3	*10	*4	*9	*6	*2
13 Oct 2024	*2	*2	*3	*10	*4	*9	*6	*2
14 Oct 2024	*2	*2	*3	*10	*4	*9	*6	*2
15 Oct 2024	*2	*2	*3	*10	*4	*9	*6	*2
16 Oct 2024	3	2	7	13	5	13	8	2
17 Oct 2024	3	2	7	13	5	13	8	2
18 Oct 2024	*3	*2	*9	*21	*5	*20	*10	*3
19 Oct 2024	*3	*2	*9	*21	*5	*20	*10	*3
20 Oct 2024	*3	*2	*9	*21	*5	*20	*10	*3
21 Oct 2024	*3	*2	*9	*21	*5	*20	*10	*3
22 Oct 2024	*3	*2	*9	*21	*5	*20	*10	*3
23 Oct 2024	3	2	11	13	4	16	7	2
24 Oct 2024	3	2	11	13	4	16	7	2
25 Oct 2024	3	2	11	13	4	16	7	2
26 Oct 2024	*3	*2	*17	*13	*5	*15	*7	*3
27 Oct 2024	*3	*2	*17	*13	*5	*15	*7	*3
28 Oct 2024	*3	*2	*17	*13	*5	*15	*7	*3
29 Oct 2024	*3	*2	*17	*13	*5	*15	*7	*3
30 Oct 2024	3	6	11	11	4	16	5	2
31 Oct 2024	3	6	11	11	4	16	5	2

* Geometric mean calculated using n<5

Table 2.2

Summary of compliance at the PLOO shore stations with the Ocean Plan's Single Sample Maximum standard for fecal coliform bacteria, which states that fecal coliform density shall not exceed 400 CFU/100 mL.

Date	D4	D5	D7	D8-B	D9	D10	D11	D12
02 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC
09 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC
16 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC
23 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC
30 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 2.3

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for *Enterococcus* at the PLOO shore stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 6 weeks unless otherwise noted (*). Values >35 CFU/100 mL exceed the standard.

Date	D4	D5	D7	D8-B	D9	D10	D11	D12
01 Oct 2024	*2	*2	*2	*4	*2	*4	*5	*2
02 Oct 2024	2	2	4	3	2	5	4	2
03 Oct 2024	2	2	4	3	2	5	4	2
04 Oct 2024	*2	*2	*4	*3	*2	*5	*3	*2
05 Oct 2024	*2	*2	*4	*3	*2	*5	*3	*2
06 Oct 2024	*2	*2	*4	*3	*2	*5	*3	*2
07 Oct 2024	*2	*2	*4	*3	*2	*5	*3	*2
08 Oct 2024	*2	*2	*4	*3	*2	*5	*3	*2
09 Oct 2024	2	2	4	5	2	6	3	2
10 Oct 2024	2	2	4	5	2	6	3	2
11 Oct 2024	*2	*2	*5	*6	*2	*8	*4	*2
12 Oct 2024	*2	*2	*5	*6	*2	*8	*4	*2
13 Oct 2024	*2	*2	*5	*6	*2	*8	*4	*2
14 Oct 2024	*2	*2	*5	*6	*2	*8	*4	*2
15 Oct 2024	*2	*2	*5	*6	*2	*8	*4	*2
16 Oct 2024	2	2	9	9	3	15	6	3
17 Oct 2024	2	2	9	9	3	15	6	3
18 Oct 2024	*3	*2	*14	*9	*3	*20	*5	*3
19 Oct 2024	*3	*2	*14	*9	*3	*20	*5	*3
20 Oct 2024	*3	*2	*14	*9	*3	*20	*5	*3
21 Oct 2024	*3	*2	*14	*9	*3	*20	*5	*3
22 Oct 2024	*3	*2	*14	*9	*3	*20	*5	*3
23 Oct 2024	2	2	9	6	3	13	4	3
24 Oct 2024	2	2	9	6	3	13	4	3
25 Oct 2024	2	2	9	6	3	13	4	3
26 Oct 2024	*3	*2	*14	*9	*3	*20	*5	*3
27 Oct 2024	*3	*2	*14	*9	*3	*20	*5	*3
28 Oct 2024	*3	*2	*14	*9	*3	*20	*5	*3
29 Oct 2024	*3	*2	*14	*9	*3	*20	*5	*3
30 Oct 2024	2	3	12	6	3	15	4	3
31 Oct 2024	2	3	12	6	3	15	4	3

* Geometric mean calculated using n<5

Table 2.4

Summary of compliance at the PLOO shore stations with the Ocean Plan's Single Sample Maximum standard for *Enterococcus* bacteria, which states that *Enterococcus* density shall not exceed 104 CFU/100 mL.

Date	D4	D5	D7	D8-B	D9	D10	D11	D12
02 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC
09 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC
16 Oct 2024	IC	IC	IC	IC	IC	E	IC	IC
23 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC
30 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 2.5

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for total coliform bacteria at the PLOO shore stations. Data are based on the median of the five most recent samples from each site over the previous 30 days unless otherwise noted (*). Values >1000 CFU/100 mL exceed the standard.

Date	D4	D5	D7	D8-B	D9	D10	D11	D12
01 Oct 2024	*112	*112	*36	*118	*36	*53	*42	*50
02 Oct 2024	126	80	58	83	39	69	36	42
03 Oct 2024	126	80	58	83	39	69	36	42
04 Oct 2024	*112	*63	*42	*56	*26	*53	*24	*36
05 Oct 2024	*112	*63	*42	*56	*26	*53	*24	*36
06 Oct 2024	*112	*63	*42	*56	*26	*53	*24	*36
07 Oct 2024	*112	*63	*42	*56	*26	*53	*24	*36
08 Oct 2024	*112	*63	*42	*56	*26	*53	*24	*36
09 Oct 2024	126	80	58	72	39	69	36	32
10 Oct 2024	126	80	58	72	39	69	36	32
11 Oct 2024	*112	*63	*75	*83	*47	*95	*42	*20
12 Oct 2024	*112	*63	*75	*83	*47	*95	*42	*20
13 Oct 2024	*112	*63	*75	*83	*47	*95	*42	*20
14 Oct 2024	*112	*63	*75	*83	*47	*95	*42	*20
15 Oct 2024	*112	*63	*75	*83	*47	*95	*42	*20
16 Oct 2024	126	80	174	99	63	110	58	32
17 Oct 2024	126	80	174	99	63	110	58	32
18 Oct 2024	*112	*63	*299	*83	*83	*112	*75	*36
19 Oct 2024	*112	*63	*299	*83	*83	*112	*75	*36
20 Oct 2024	*112	*63	*299	*83	*83	*112	*75	*36
21 Oct 2024	*112	*63	*299	*83	*83	*112	*75	*36
22 Oct 2024	*112	*63	*299	*83	*83	*112	*75	*36
23 Oct 2024	126	80	276	99	63	105	58	32
24 Oct 2024	126	80	276	99	63	105	58	32
25 Oct 2024	126	80	276	99	63	105	58	32
26 Oct 2024	*200	*112	*532	*112	*83	*159	*63	*36
27 Oct 2024	*200	*112	*532	*112	*83	*159	*63	*36
28 Oct 2024	*200	*112	*532	*112	*83	*159	*63	*36
29 Oct 2024	*200	*112	*532	*112	*83	*159	*63	*36
30 Oct 2024	126	126	317	91	63	105	50	32
31 Oct 2024	126	126	317	91	63	105	50	32

* Median calculated using n<5

Table 2.6

Summary of compliance at the PLOO shore stations with the Ocean Plan's Single Sample Maximum for total coliform bacteria, which states that total coliform density shall not exceed 10^4 CFU/100 mL.

Date	D4	D5	D7	D8-B	D9	D10	D11	D12
02 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC
09 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC
16 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC
23 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC
30 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 2.7

Summary of compliance at the PLOO shore stations with the Ocean Plan's Single Sample Maximum standard for total coliform bacteria and the fecal/total coliform ratio (F:T), which states that total coliform density shall not exceed 1,000 CFU/100 mL when F:T > 0.1.

Date	D4	D5	D7	D8-B	D9	D10	D11	D12
02 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC
09 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC
16 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC
23 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC
30 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 2.8

Summary of water quality parameters at the PLOO shore stations for each sample date. Densities of fecal coliform (Fecal) and *Enterococcus* (Entero) are reported as CFU/100 mL. Comments follow the data summary.

Station	Date	Time	Total	Fecal	Entero
D10	02 Oct 2024	1117	200e	8e	26e
D10	09 Oct 2024	941	200e	<20	<20
D10	16 Oct 2024	1056	<200	48	160e
D10	23 Oct 2024	949	80e	6e	<2
D10	30 Oct 2024	955	<20	<20	4e
D11	02 Oct 2024	1129	<20	2e	<2
D11	09 Oct 2024	950	<200	<20	4e
D11	16 Oct 2024	1116	<200	24e	42
D11	23 Oct 2024	939	20e	2e	2e
D11	30 Oct 2024	1006	<20	<2	<2
D12	02 Oct 2024	1159	<20	<2	<2
D12	09 Oct 2024	1014	<20	2e	<2
D12	16 Oct 2024	1158	<200	6e	8e
D12	23 Oct 2024	921	20e	<2	<2
D12	30 Oct 2024	1029	20e	2e	<2
D4	02 Oct 2024	932	<200	<2	<2
D4	09 Oct 2024	838	<200	<2	<2
D4	16 Oct 2024	915	<200	10e	6e
D4	23 Oct 2024	1110	<200	<2	<2
D4	30 Oct 2024	850	20e	<2	<2
D5	02 Oct 2024	918	<20	4e	<2
D5	09 Oct 2024	825	<200	2e	<2
D5	16 Oct 2024	855	<200	<2	2e
D5	23 Oct 2024	1047	<200	2e	<2
D5	30 Oct 2024	840	<200	<200	<20
D7	02 Oct 2024	950	400e	10e	44
D7	09 Oct 2024	902	<200	<2	4e
D7	16 Oct 2024	945	5000	200e	100e
D7	23 Oct 2024	1024	<200	<20	<2
D7	30 Oct 2024	914	40e	2e	6e
D8-B	02 Oct 2024	1053	20e	<20	<2
D8-B	09 Oct 2024	920	<200	<20	20e
D8-B	16 Oct 2024	1009	<200	38e	72
D8-B	23 Oct 2024	1010	<200	<2	<2
D8-B	30 Oct 2024	930	40e	6e	<2
D9	02 Oct 2024	1107	60e	2e	2e
D9	09 Oct 2024	832	<200	4e	<2
D9	16 Oct 2024	1037	<200	26e	14e
D9	23 Oct 2024	958	20e	<2	<2
D9	30 Oct 2024	942	20e	<2	<2

ns = not sampled

ND = no data

Comments

date	station	depth	parmcode	comments
02-Oct-2024	D11			1 colony found on Pre-TSA plate. None found on mEI, so results likely not affected.
02-Oct-2024	D12			1 colony found on Pre-TSA plate. None found on mEI, so results likely not affected.
17-Oct-2024	D10		ENTERO	Resample
17-Oct-2024	D10			Resample

Table 2.9

Summary of visual observations made during the month for each PLOO shore station by sample date.

Station	Date	Parameter	Value
D4	02 Oct 2024	Arrive Time	932
D4	02 Oct 2024	Wind Speed (kts)	2.7
D4	02 Oct 2024	Wind Dir	N
D4	02 Oct 2024	Animal Life	
D4	02 Oct 2024	Floatables	None
D4	02 Oct 2024	Current Direction	N
D4	02 Oct 2024	Water Temp (C)	11
D4	02 Oct 2024	High Tide Time	924
D4	02 Oct 2024	Low Tide Time	321
D4	02 Oct 2024	Comments	Water clear; Trash-1; Algae
D4	09 Oct 2024	Arrive Time	838
D4	09 Oct 2024	Wind Speed (kts)	0.6
D4	09 Oct 2024	Wind Dir	W
D4	09 Oct 2024	Animal Life	
D4	09 Oct 2024	Floatables	None
D4	09 Oct 2024	Current Direction	S
D4	09 Oct 2024	Water Temp (C)	16.3
D4	09 Oct 2024	High Tide Time	1232
D4	09 Oct 2024	Low Tide Time	2205
D4	09 Oct 2024	Comments	Water clear; Trash-1; Kelp;Seagrass;Algae;Debris
D4	16 Oct 2024	Arrive Time	915
D4	16 Oct 2024	Wind Speed (kts)	1.1
D4	16 Oct 2024	Wind Dir	W
D4	16 Oct 2024	Animal Life	
D4	16 Oct 2024	Floatables	None
D4	16 Oct 2024	Current Direction	S
D4	16 Oct 2024	Water Temp (C)	14.9
D4	16 Oct 2024	High Tide Time	838
D4	16 Oct 2024	Low Tide Time	233
D4	16 Oct 2024	Comments	Water clear; Trash-1; Kelp;Seagrass
D4	23 Oct 2024	Arrive Time	1118
D4	23 Oct 2024	Wind Speed (kts)	0.7
D4	23 Oct 2024	Wind Dir	W
D4	23 Oct 2024	Animal Life	
D4	23 Oct 2024	Floatables	None
D4	23 Oct 2024	Current Direction	E
D4	23 Oct 2024	Water Temp (C)	18.4
D4	23 Oct 2024	High Tide Time	505
D4	23 Oct 2024	Low Tide Time	753
D4	23 Oct 2024	Comments	Water clear; Trash-1
D4	30 Oct 2024	Arrive Time	850
D4	30 Oct 2024	Wind Speed (kts)	0.5
D4	30 Oct 2024	Wind Dir	NW
D4	30 Oct 2024	Animal Life	
D4	30 Oct 2024	Floatables	
D4	30 Oct 2024	Current Direction	S
D4	30 Oct 2024	Water Temp (C)	15.3
D4	30 Oct 2024	High Tide Time	821
D4	30 Oct 2024	Low Tide Time	212
D4	30 Oct 2024	Comments	Water clear; Trash-1; Kelp;Seagrass
D5	02 Oct 2024	Arrive Time	918

Station	Date	Parameter	Value
D5	02 Oct 2024	Wind Speed (kts)	2.7
D5	02 Oct 2024	Wind Dir	NW
D5	02 Oct 2024	Animal Life	
D5	02 Oct 2024	Floatables	None
D5	02 Oct 2024	Current Direction	N
D5	02 Oct 2024	Water Temp (C)	13
D5	02 Oct 2024	High Tide Time	924
D5	02 Oct 2024	Low Tide Time	321
D5	02 Oct 2024	Comments	Water clear; Trash-1; Algae
D5	09 Oct 2024	Arrive Time	825
D5	09 Oct 2024	Wind Speed (kts)	0
D5	09 Oct 2024	Wind Dir	W
D5	09 Oct 2024	Animal Life	
D5	09 Oct 2024	Floatables	None
D5	09 Oct 2024	Current Direction	S
D5	09 Oct 2024	Water Temp (C)	16.6
D5	09 Oct 2024	High Tide Time	1232
D5	09 Oct 2024	Low Tide Time	2205
D5	09 Oct 2024	Comments	Water clear; Trash-1; Kelp;Seagrass;Debris;Algae
D5	16 Oct 2024	Arrive Time	855
D5	16 Oct 2024	Wind Speed (kts)	0.0168
D5	16 Oct 2024	Wind Dir	XX
D5	16 Oct 2024	Animal Life	
D5	16 Oct 2024	Floatables	Foam
D5	16 Oct 2024	Current Direction	S
D5	16 Oct 2024	Water Temp (C)	16.8
D5	16 Oct 2024	High Tide Time	838
D5	16 Oct 2024	Low Tide Time	233
D5	16 Oct 2024	Comments	Water clear; Trash-1; Kelp;Seagrass
D5	23 Oct 2024	Arrive Time	1047
D5	23 Oct 2024	Wind Speed (kts)	1.7
D5	23 Oct 2024	Wind Dir	SW
D5	23 Oct 2024	Animal Life	
D5	23 Oct 2024	Floatables	None
D5	23 Oct 2024	Current Direction	E
D5	23 Oct 2024	Water Temp (C)	18.6
D5	23 Oct 2024	High Tide Time	505
D5	23 Oct 2024	Low Tide Time	753
D5	23 Oct 2024	Comments	Water clear; Trash-1; Kelp;Seagrass;Algae;Debris
D5	30 Oct 2024	Arrive Time	840
D5	30 Oct 2024	Wind Speed (kts)	0.5
D5	30 Oct 2024	Wind Dir	NW
D5	30 Oct 2024	Animal Life	
D5	30 Oct 2024	Floatables	None
D5	30 Oct 2024	Current Direction	S
D5	30 Oct 2024	Water Temp (C)	15.2
D5	30 Oct 2024	High Tide Time	821
D5	30 Oct 2024	Low Tide Time	212
D5	30 Oct 2024	Comments	Water turbid; Trash-1; Seagrass;Kelp; Sewage-like odor
D7	02 Oct 2024	Arrive Time	950
D7	02 Oct 2024	Wind Speed (kts)	4.6
D7	02 Oct 2024	Wind Dir	N
D7	02 Oct 2024	Animal Life	
D7	02 Oct 2024	Floatables	None
D7	02 Oct 2024	Current Direction	N
D7	02 Oct 2024	Water Temp (C)	11

Station	Date	Parameter	Value
D7	02 Oct 2024	High Tide Time	924
D7	02 Oct 2024	Low Tide Time	321
D7	02 Oct 2024	Comments	Water clear; Trash-1; Algae; Person/Walker/Jogger-1
D7	09 Oct 2024	Arrive Time	902
D7	09 Oct 2024	Wind Speed (kts)	0
D7	09 Oct 2024	Wind Dir	W
D7	09 Oct 2024	Animal Life	
D7	09 Oct 2024	Floatables	None
D7	09 Oct 2024	Current Direction	S
D7	09 Oct 2024	Water Temp (C)	15.8
D7	09 Oct 2024	High Tide Time	1232
D7	09 Oct 2024	Low Tide Time	2205
D7	09 Oct 2024	Comments	Water clear; Boogie boarder/Swimmer-1; Trash-1; Kelp;Sea-grass;Algae;Debris; Person/Walker/Jogger-1
D7	16 Oct 2024	Arrive Time	945
D7	16 Oct 2024	Wind Speed (kts)	0
D7	16 Oct 2024	Wind Dir	XX
D7	16 Oct 2024	Animal Life	
D7	16 Oct 2024	Floatables	None
D7	16 Oct 2024	Current Direction	S
D7	16 Oct 2024	Water Temp (C)	16.5
D7	16 Oct 2024	High Tide Time	838
D7	16 Oct 2024	Low Tide Time	233
D7	16 Oct 2024	Comments	Water clear; Trash-1; Kelp
D7	23 Oct 2024	Arrive Time	1024
D7	23 Oct 2024	Wind Speed (kts)	0.1
D7	23 Oct 2024	Wind Dir	W
D7	23 Oct 2024	Animal Life	
D7	23 Oct 2024	Floatables	None
D7	23 Oct 2024	Current Direction	E
D7	23 Oct 2024	Water Temp (C)	17.8
D7	23 Oct 2024	High Tide Time	505
D7	23 Oct 2024	Low Tide Time	753
D7	23 Oct 2024	Comments	Water clear; Surfer/Paddle boarder-1; Trash-1; Kelp;Sea-grass;Algae;Debris
D7	30 Oct 2024	Arrive Time	914
D7	30 Oct 2024	Wind Speed (kts)	0
D7	30 Oct 2024	Wind Dir	XX
D7	30 Oct 2024	Animal Life	
D7	30 Oct 2024	Floatables	None
D7	30 Oct 2024	Current Direction	S
D7	30 Oct 2024	Water Temp (C)	15.6
D7	30 Oct 2024	High Tide Time	821
D7	30 Oct 2024	Low Tide Time	212
D7	30 Oct 2024	Comments	Water clear; Trash-1; Kelp;Seagrass;Algae; Person/Walker/Jogger-1
D8-B	02 Oct 2024	Arrive Time	1053
D8-B	02 Oct 2024	Wind Speed (kts)	1.5
D8-B	02 Oct 2024	Wind Dir	NW
D8-B	02 Oct 2024	Animal Life	
D8-B	02 Oct 2024	Floatables	None
D8-B	02 Oct 2024	Current Direction	N
D8-B	02 Oct 2024	Water Temp (C)	14
D8-B	02 Oct 2024	High Tide Time	924
D8-B	02 Oct 2024	Low Tide Time	321
D8-B	02 Oct 2024	Comments	Water clear; Trash-1; Algae

Station	Date	Parameter	Value
D8-B	09 Oct 2024	Arrive Time	920
D8-B	09 Oct 2024	Wind Speed (kts)	1.5
D8-B	09 Oct 2024	Wind Dir	W
D8-B	09 Oct 2024	Animal Life	
D8-B	09 Oct 2024	Floatables	None
D8-B	09 Oct 2024	Current Direction	S
D8-B	09 Oct 2024	Water Temp (C)	16.1
D8-B	09 Oct 2024	High Tide Time	1232
D8-B	09 Oct 2024	Low Tide Time	2205
D8-B	09 Oct 2024	Comments	Water clear; Trash-1; Kelp;Seagrass;Algae;Debris
D8-B	16 Oct 2024	Arrive Time	1009
D8-B	16 Oct 2024	Wind Speed (kts)	2.7
D8-B	16 Oct 2024	Wind Dir	W
D8-B	16 Oct 2024	Animal Life	
D8-B	16 Oct 2024	Floatables	Debris, red algae
D8-B	16 Oct 2024	Current Direction	S
D8-B	16 Oct 2024	Water Temp (C)	17
D8-B	16 Oct 2024	High Tide Time	838
D8-B	16 Oct 2024	Low Tide Time	233
D8-B	16 Oct 2024	Comments	Water clear; Trash-2; Seagrass; Person/Walker/Jogger-1
D8-B	23 Oct 2024	Arrive Time	1010
D8-B	23 Oct 2024	Wind Speed (kts)	2.7
D8-B	23 Oct 2024	Wind Dir	W
D8-B	23 Oct 2024	Animal Life	
D8-B	23 Oct 2024	Floatables	None
D8-B	23 Oct 2024	Current Direction	E
D8-B	23 Oct 2024	Water Temp (C)	18.6
D8-B	23 Oct 2024	High Tide Time	505
D8-B	23 Oct 2024	Low Tide Time	753
D8-B	23 Oct 2024	Comments	Water clear; Trash-1; Kelp;Seagrass;Debris;Algae
D8-B	30 Oct 2024	Arrive Time	930
D8-B	30 Oct 2024	Wind Speed (kts)	0.7
D8-B	30 Oct 2024	Wind Dir	NW
D8-B	30 Oct 2024	Animal Life	
D8-B	30 Oct 2024	Floatables	None
D8-B	30 Oct 2024	Current Direction	S
D8-B	30 Oct 2024	Water Temp (C)	16.1
D8-B	30 Oct 2024	High Tide Time	821
D8-B	30 Oct 2024	Low Tide Time	212
D8-B	30 Oct 2024	Comments	Water clear; Trash-1; Kelp;Seagrass;Algae
D9	02 Oct 2024	Arrive Time	1107
D9	02 Oct 2024	Wind Speed (kts)	0.1
D9	02 Oct 2024	Wind Dir	W
D9	02 Oct 2024	Animal Life	
D9	02 Oct 2024	Floatables	None
D9	02 Oct 2024	Current Direction	N
D9	02 Oct 2024	Water Temp (C)	12
D9	02 Oct 2024	High Tide Time	924
D9	02 Oct 2024	Low Tide Time	321
D9	02 Oct 2024	Comments	Water clear; Trash-1; Algae; Person/Walker/Jogger-1
D9	09 Oct 2024	Arrive Time	932
D9	09 Oct 2024	Wind Speed (kts)	1
D9	09 Oct 2024	Wind Dir	W
D9	09 Oct 2024	Animal Life	
D9	09 Oct 2024	Floatables	None

Station	Date	Parameter	Value
D9	09 Oct 2024	Current Direction	S
D9	09 Oct 2024	Water Temp (C)	16.5
D9	09 Oct 2024	High Tide Time	1232
D9	09 Oct 2024	Low Tide Time	2205
D9	09 Oct 2024	Comments	Water clear; Trash-1; Kelp;Seagrass;Algae;Debris
D9	16 Oct 2024	Arrive Time	1037
D9	16 Oct 2024	Wind Speed (kts)	2.9
D9	16 Oct 2024	Wind Dir	NW
D9	16 Oct 2024	Animal Life	
D9	16 Oct 2024	Floatables	None
D9	16 Oct 2024	Current Direction	S
D9	16 Oct 2024	Water Temp (C)	16.4
D9	16 Oct 2024	High Tide Time	838
D9	16 Oct 2024	Low Tide Time	233
D9	16 Oct 2024	Comments	Water clear; Surfer/Paddle boarder-4; Trash-1; Sea-grass;Kelp;Algae; Person/Walker/Jogger-3
D9	23 Oct 2024	Arrive Time	958
D9	23 Oct 2024	Wind Speed (kts)	1.3
D9	23 Oct 2024	Wind Dir	SW
D9	23 Oct 2024	Animal Life	
D9	23 Oct 2024	Floatables	None
D9	23 Oct 2024	Current Direction	E
D9	23 Oct 2024	Water Temp (C)	18
D9	23 Oct 2024	High Tide Time	505
D9	23 Oct 2024	Low Tide Time	753
D9	23 Oct 2024	Comments	Water clear; Trash-1; Kelp;Seagrass;Algae;Debris; Per-son/Walker/Jogger-4
D9	30 Oct 2024	Arrive Time	942
D9	30 Oct 2024	Wind Speed (kts)	0.9
D9	30 Oct 2024	Wind Dir	NW
D9	30 Oct 2024	Animal Life	
D9	30 Oct 2024	Floatables	None
D9	30 Oct 2024	Current Direction	S
D9	30 Oct 2024	Water Temp (C)	16
D9	30 Oct 2024	High Tide Time	821
D9	30 Oct 2024	Low Tide Time	212
D9	30 Oct 2024	Comments	Water clear; Trash-1; Kelp;Seagrass;Algae
D10	02 Oct 2024	Arrive Time	1117
D10	02 Oct 2024	Wind Speed (kts)	1.7
D10	02 Oct 2024	Wind Dir	NW
D10	02 Oct 2024	Animal Life	
D10	02 Oct 2024	Floatables	None
D10	02 Oct 2024	Current Direction	N
D10	02 Oct 2024	Water Temp (C)	12
D10	02 Oct 2024	High Tide Time	924
D10	02 Oct 2024	Low Tide Time	321
D10	02 Oct 2024	Comments	Water clear; Trash-1; Seagrass; Person/Walker/Jogger-20
D10	09 Oct 2024	Arrive Time	941
D10	09 Oct 2024	Wind Speed (kts)	1.6
D10	09 Oct 2024	Wind Dir	W
D10	09 Oct 2024	Animal Life	
D10	09 Oct 2024	Floatables	None
D10	09 Oct 2024	Current Direction	S
D10	09 Oct 2024	Water Temp (C)	16.2
D10	09 Oct 2024	High Tide Time	1232
D10	09 Oct 2024	Low Tide Time	2205

Station	Date	Parameter	Value
D10	09 Oct 2024	Comments	Water clear; Trash-1; Seagrass;Debris;Kelp
D10	16 Oct 2024	Arrive Time	1056
D10	16 Oct 2024	Wind Speed (kts)	2.1
D10	16 Oct 2024	Wind Dir	W
D10	16 Oct 2024	Animal Life	
D10	16 Oct 2024	Floatables	None
D10	16 Oct 2024	Current Direction	S
D10	16 Oct 2024	Water Temp (C)	17.4
D10	16 Oct 2024	High Tide Time	838
D10	16 Oct 2024	Low Tide Time	233
D10	16 Oct 2024	Comments	Water clear; Surfer/Paddle boarder-2; Trash-1; Kelp;Sea-grass; Person/Walker/Jogger-4
D10	17 Oct 2024	Arrive Time	935
D10	17 Oct 2024	Wind Speed (kts)	1.1
D10	17 Oct 2024	Wind Dir	W
D10	17 Oct 2024	Animal Life	
D10	17 Oct 2024	Floatables	Debris
D10	17 Oct 2024	Current Direction	S
D10	17 Oct 2024	Water Temp (C)	17
D10	17 Oct 2024	High Tide Time	910
D10	17 Oct 2024	Low Tide Time	306
D10	17 Oct 2024	Comments	Water clear; Surfer/Paddle boarder-10; Trash-1; Kelp;Sea-grass; Person/Walker/Jogger-8
D10	23 Oct 2024	Arrive Time	949
D10	23 Oct 2024	Wind Speed (kts)	2.1
D10	23 Oct 2024	Wind Dir	E
D10	23 Oct 2024	Animal Life	
D10	23 Oct 2024	Floatables	None
D10	23 Oct 2024	Current Direction	E
D10	23 Oct 2024	Water Temp (C)	20
D10	23 Oct 2024	High Tide Time	505
D10	23 Oct 2024	Low Tide Time	753
D10	23 Oct 2024	Comments	Water clear; Surfer/Paddle boarder-4; Trash-1; Kelp;Sea-grass;Debris; Person/Walker/Jogger-1
D10	30 Oct 2024	Arrive Time	955
D10	30 Oct 2024	Wind Speed (kts)	1.1
D10	30 Oct 2024	Wind Dir	W
D10	30 Oct 2024	Animal Life	
D10	30 Oct 2024	Floatables	None
D10	30 Oct 2024	Current Direction	S
D10	30 Oct 2024	Water Temp (C)	16.5
D10	30 Oct 2024	High Tide Time	821
D10	30 Oct 2024	Low Tide Time	212
D10	30 Oct 2024	Comments	Water clear; Surfer/Paddle boarder-10; Trash-1; Kelp;Sea-grass; Person/Walker/Jogger-4
D11	02 Oct 2024	Arrive Time	1129
D11	02 Oct 2024	Wind Speed (kts)	3.6
D11	02 Oct 2024	Wind Dir	NW
D11	02 Oct 2024	Animal Life	Bird-1;
D11	02 Oct 2024	Floatables	None
D11	02 Oct 2024	Current Direction	N
D11	02 Oct 2024	Water Temp (C)	19
D11	02 Oct 2024	High Tide Time	924
D11	02 Oct 2024	Low Tide Time	321
D11	02 Oct 2024	Comments	Water clear; Boogie boarder/Swimmer-6; Trash-1; Algae;Sea-grass; Person/Walker/Jogger-20

Station	Date	Parameter	Value
D11	09 Oct 2024	Arrive Time	950
D11	09 Oct 2024	Wind Speed (kts)	1.2
D11	09 Oct 2024	Wind Dir	W
D11	09 Oct 2024	Animal Life	
D11	09 Oct 2024	Floatables	None
D11	09 Oct 2024	Current Direction	S
D11	09 Oct 2024	Water Temp (C)	15.5
D11	09 Oct 2024	High Tide Time	1232
D11	09 Oct 2024	Low Tide Time	2205
D11	09 Oct 2024	Comments	Water clear; Trash-1; Kelp;Seagrass;Debris;Algae
D11	16 Oct 2024	Arrive Time	1116
D11	16 Oct 2024	Wind Speed (kts)	1.7
D11	16 Oct 2024	Wind Dir	W
D11	16 Oct 2024	Animal Life	
D11	16 Oct 2024	Floatables	None
D11	16 Oct 2024	Current Direction	S
D11	16 Oct 2024	Water Temp (C)	17.4
D11	16 Oct 2024	High Tide Time	838
D11	16 Oct 2024	Low Tide Time	233
D11	16 Oct 2024	Comments	Water clear; Surfer/Paddle boarder-8; Trash-1; Kelp;Sea-grass;Algae; Person/Walker/Jogger-2
D11	23 Oct 2024	Arrive Time	939
D11	23 Oct 2024	Wind Speed (kts)	2.5
D11	23 Oct 2024	Wind Dir	W
D11	23 Oct 2024	Animal Life	
D11	23 Oct 2024	Floatables	None
D11	23 Oct 2024	Current Direction	E
D11	23 Oct 2024	Water Temp (C)	17
D11	23 Oct 2024	High Tide Time	505
D11	23 Oct 2024	Low Tide Time	753
D11	23 Oct 2024	Comments	Water clear; Boogie boarder/Swimmer-4; Trash-1; Sea-grass;Kelp;Algae;Debris; Person/Walker/Jogger-2
D11	30 Oct 2024	Arrive Time	1006
D11	30 Oct 2024	Wind Speed (kts)	1.1
D11	30 Oct 2024	Wind Dir	W
D11	30 Oct 2024	Animal Life	
D11	30 Oct 2024	Floatables	None
D11	30 Oct 2024	Current Direction	S
D11	30 Oct 2024	Water Temp (C)	17.3
D11	30 Oct 2024	High Tide Time	821
D11	30 Oct 2024	Low Tide Time	212
D11	30 Oct 2024	Comments	Water clear; Surfer/Paddle boarder-10; Trash-1; Sea-grass;Kelp;Algae; Person/Walker/Jogger-3
D12	02 Oct 2024	Arrive Time	1159
D12	02 Oct 2024	Wind Speed (kts)	6.9
D12	02 Oct 2024	Wind Dir	N
D12	02 Oct 2024	Animal Life	
D12	02 Oct 2024	Floatables	None
D12	02 Oct 2024	Current Direction	N
D12	02 Oct 2024	Water Temp (C)	14
D12	02 Oct 2024	High Tide Time	924
D12	02 Oct 2024	Low Tide Time	321
D12	02 Oct 2024	Comments	Water clear; Boogie boarder/Swimmer-2; Trash-1; Seagrass; Person/Walker/Jogger-40
D12	09 Oct 2024	Arrive Time	1014

Station	Date	Parameter	Value
D12	09 Oct 2024	Wind Speed (kts)	3.3
D12	09 Oct 2024	Wind Dir	W
D12	09 Oct 2024	Animal Life	
D12	09 Oct 2024	Floatables	None
D12	09 Oct 2024	Current Direction	S
D12	09 Oct 2024	Water Temp (C)	15
D12	09 Oct 2024	High Tide Time	1232
D12	09 Oct 2024	Low Tide Time	2205
D12	09 Oct 2024	Comments	Water clear; Trash-1; Kelp;Seagrass;Debris; Person/Walker/Jogger-6
D12	16 Oct 2024	Arrive Time	1158
D12	16 Oct 2024	Wind Speed (kts)	1.2
D12	16 Oct 2024	Wind Dir	W
D12	16 Oct 2024	Animal Life	
D12	16 Oct 2024	Floatables	None
D12	16 Oct 2024	Current Direction	S
D12	16 Oct 2024	Water Temp (C)	17.5
D12	16 Oct 2024	High Tide Time	838
D12	16 Oct 2024	Low Tide Time	233
D12	16 Oct 2024	Comments	Water clear; Trash-1; Kelp;Seagrass; Person/Walker/Jogger-30
D12	23 Oct 2024	Arrive Time	921
D12	23 Oct 2024	Wind Speed (kts)	4.6
D12	23 Oct 2024	Wind Dir	SW
D12	23 Oct 2024	Animal Life	
D12	23 Oct 2024	Floatables	None
D12	23 Oct 2024	Current Direction	E
D12	23 Oct 2024	Water Temp (C)	21.9
D12	23 Oct 2024	High Tide Time	505
D12	23 Oct 2024	Low Tide Time	753
D12	23 Oct 2024	Comments	Water clear; Trash-1; Kelp;Seagrass;Debris
D12	30 Oct 2024	Arrive Time	1029
D12	30 Oct 2024	Wind Speed (kts)	3.3
D12	30 Oct 2024	Wind Dir	W
D12	30 Oct 2024	Animal Life	
D12	30 Oct 2024	Floatables	None
D12	30 Oct 2024	Current Direction	S
D12	30 Oct 2024	Water Temp (C)	17.6
D12	30 Oct 2024	High Tide Time	821
D12	30 Oct 2024	Low Tide Time	212
D12	30 Oct 2024	Comments	Water clear; Surfer/Paddle boarder-4; Trash-1; Kelp;Seagrass; Person/Walker/Jogger-4

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Kelp Stations

Table 3.1

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for fecal coliform bacteria at the PLOO kelp stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 30 days unless otherwise noted (*). Values >200 CFU/100 mL exceed the standard.

Date	A1	A6	A7	C4	C5	C6	C7	C8
01 Oct 2024	2	3	2	2	2	2	3	2
02 Oct 2024	2	3	2	2	2	2	3	2
03 Oct 2024	*2	*2	*2	*2	*2	*2	*3	*2
04 Oct 2024	*2	*2	*2	*2	*2	*2	*3	*2
05 Oct 2024	*2	*2	*2	*2	*2	*2	*3	*2
06 Oct 2024	*2	*2	*2	*2	*2	*2	*3	*2
07 Oct 2024	*2	*2	*2	*2	*2	*2	*3	*2
08 Oct 2024	3	3	3	2	2	2	3	2
09 Oct 2024	3	3	3	2	2	2	3	2
10 Oct 2024	*3	*3	*4	*2	*2	*2	*3	*2
11 Oct 2024	*3	*3	*4	*2	*2	*2	*3	*2
12 Oct 2024	*3	*3	*4	*2	*2	*2	*3	*2
13 Oct 2024	*3	*3	*4	*2	*2	*2	*3	*2
14 Oct 2024	*3	*3	*4	*2	*2	*2	*3	*2
15 Oct 2024	4	3	4	2	2	2	3	2
16 Oct 2024	4	3	4	2	2	2	3	2
17 Oct 2024	*4	*3	*4	*2	*2	*2	*3	*2
18 Oct 2024	*4	*3	*4	*2	*2	*2	*3	*2
19 Oct 2024	*4	*3	*4	*2	*2	*2	*3	*2
20 Oct 2024	*4	*3	*4	*2	*2	*2	*3	*2
21 Oct 2024	4	3	4	2	2	2	3	2
22 Oct 2024	4	3	4	2	2	2	3	2
23 Oct 2024	4	3	4	2	2	2	3	2
24 Oct 2024	*5	*3	*4	*2	*2	*2	*3	*2
25 Oct 2024	*5	*3	*4	*2	*2	*2	*3	*2
26 Oct 2024	*5	*3	*4	*2	*2	*2	*3	*2
27 Oct 2024	*5	*3	*4	*2	*2	*2	*3	*2
28 Oct 2024	*5	*3	*4	*2	*2	*2	*3	*2
29 Oct 2024	*5	*3	*4	*2	*2	*2	*3	*2
30 Oct 2024	*6	*3	*6	*2	*2	*2	*2	*2
31 Oct 2024	*6	*3	*6	*2	*2	*2	*2	*2

* Geometric mean calculated using n<5

Table 3.2

Summary of compliance at the PLOO kelp stations with the Ocean Plan's Single Sample Maximum standard for fecal coliform bacteria, which states that fecal coliform density shall not exceed 400 CFU/100 mL.

Date	A1	A6	A7	C4	C5	C6	C7	C8
08 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC
15 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC
21 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC
30 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 3.3

Summary of compliance with the Ocean Plan’s 30-day Geometric Mean standard for *Enterococcus* at the PLOO kelp stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 6 weeks unless otherwise noted (*). Values >35 CFU/100 mL exceed the standard.

Date	A1	A6	A7	C4	C5	C6	C7	C8
01 Oct 2024	2	2	2	2	2	2	2	3
02 Oct 2024	2	2	2	2	2	2	2	3
03 Oct 2024	*2	*2	*2	*2	*2	*2	*2	*3
04 Oct 2024	*2	*2	*2	*2	*2	*2	*2	*3
05 Oct 2024	*2	*2	*2	*2	*2	*2	*2	*3
06 Oct 2024	*2	*2	*2	*2	*2	*2	*2	*3
07 Oct 2024	*2	*2	*2	*2	*2	*2	*2	*3
08 Oct 2024	2	2	2	2	2	2	2	3
09 Oct 2024	2	2	2	2	2	2	2	3
10 Oct 2024	*2	*2	*2	*2	*2	*2	*2	*3
11 Oct 2024	*2	*2	*2	*2	*2	*2	*2	*3
12 Oct 2024	*2	*2	*2	*2	*2	*2	*2	*3
13 Oct 2024	*2	*2	*2	*2	*2	*2	*2	*3
14 Oct 2024	*2	*2	*2	*2	*2	*2	*2	*3
15 Oct 2024	2	2	2	2	2	2	2	3
16 Oct 2024	2	2	2	2	2	2	2	3
17 Oct 2024	*2	*2	*2	*2	*2	*2	*2	*2
18 Oct 2024	*2	*2	*2	*2	*2	*2	*2	*2
19 Oct 2024	*2	*2	*2	*2	*2	*2	*2	*2
20 Oct 2024	*2	*2	*2	*2	*2	*2	*2	*2
21 Oct 2024	2	2	2	2	2	2	2	2
22 Oct 2024	2	2	2	2	2	2	2	2
23 Oct 2024	2	2	2	2	2	2	2	2
24 Oct 2024	*2	*2	*2	*2	*2	*2	*2	*2
25 Oct 2024	*2	*2	*2	*2	*2	*2	*2	*2
26 Oct 2024	*2	*2	*2	*2	*2	*2	*2	*2
27 Oct 2024	*2	*2	*2	*2	*2	*2	*2	*2
28 Oct 2024	*2	*2	*2	*2	*2	*2	*2	*2
29 Oct 2024	*2	*2	*2	*2	*2	*2	*2	*2
30 Oct 2024	*2	*2	*2	*2	*2	*2	*2	*2
31 Oct 2024	*2	*2	*2	*2	*2	*2	*2	*2

* Geometric mean calculated using n<5

Table 3.4

Summary of compliance at the PLOO kelp stations with the Ocean Plan's Single Sample Maximum standard for *Enterococcus* bacteria, which states that *Enterococcus* density shall not exceed 104 CFU/100 mL.

Date	A1	A6	A7	C4	C5	C6	C7	C8
08 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC
15 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC
21 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC
30 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 3.5

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for total coliform bacteria at the PLOO kelp stations. Data are based on the median of the five most recent samples from each site over the previous 30 days unless otherwise noted (*). Values >1000 CFU/100 mL exceed the standard.

Date	A1	A6	A7	C4	C5	C6	C7	C8
01 Oct 2024	4	7	5	3	3	6	9	4
02 Oct 2024	4	7	5	3	3	6	9	4
03 Oct 2024	*3	*6	*4	*2	*3	*6	*9	*3
04 Oct 2024	*3	*6	*4	*2	*3	*6	*9	*3
05 Oct 2024	*3	*6	*4	*2	*3	*6	*9	*3
06 Oct 2024	*3	*6	*4	*2	*3	*6	*9	*3
07 Oct 2024	*3	*6	*4	*2	*3	*6	*9	*3
08 Oct 2024	5	7	6	2	3	5	6	3
09 Oct 2024	5	7	6	2	3	5	6	3
10 Oct 2024	*6	*10	*8	*2	*4	*6	*9	*3
11 Oct 2024	*6	*10	*8	*2	*4	*6	*9	*3
12 Oct 2024	*6	*10	*8	*2	*4	*6	*9	*3
13 Oct 2024	*6	*10	*8	*2	*4	*6	*9	*3
14 Oct 2024	*6	*10	*8	*2	*4	*6	*9	*3
15 Oct 2024	8	10	9	3	5	5	7	3
16 Oct 2024	8	10	9	3	5	5	7	3
17 Oct 2024	*11	*15	*10	*2	*6	*4	*6	*3
18 Oct 2024	*11	*15	*10	*2	*6	*4	*6	*3
19 Oct 2024	*11	*15	*10	*2	*6	*4	*6	*3
20 Oct 2024	*11	*15	*10	*2	*6	*4	*6	*3
21 Oct 2024	9	10	8	2	5	3	5	3
22 Oct 2024	9	10	8	2	5	3	5	3
23 Oct 2024	9	10	8	2	5	3	5	3
24 Oct 2024	*14	*13	*11	*2	*4	*3	*6	*3
25 Oct 2024	*14	*13	*11	*2	*4	*3	*6	*3
26 Oct 2024	*14	*13	*11	*2	*4	*3	*6	*3
27 Oct 2024	*14	*13	*11	*2	*4	*3	*6	*3
28 Oct 2024	*14	*13	*11	*2	*4	*3	*6	*3
29 Oct 2024	*14	*13	*11	*2	*4	*3	*6	*3
30 Oct 2024	*14	*8	*19	*2	*6	*3	*3	*2
31 Oct 2024	*14	*8	*19	*2	*6	*3	*3	*2

- Median calculated using n<5

Table 3.6

Summary of compliance at the PLOO kelp stations with the Ocean Plan's Single Sample Maximum for total coliform bacteria, which states that total coliform density shall not exceed 400 CFU/100 mL.

Date	A1	A6	A7	C4	C5	C6	C7	C8
08 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC
15 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC
21 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC
30 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 3.7

Summary of compliance at the PLOO kelp stations with the Ocean Plan's Single Sample Maximum standard for total coliform bacteria and the fecal/total coliform ratio (F:T), which states that total coliform density shall not exceed 1,000 CFU/100 mL when F:T > 0.1.

Date	A1	A6	A7	C4	C5	C6	C7	C8
08 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC
15 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC
21 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC
30 Oct 2024	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 3.8

Summary of water quality parameters at the PLOO kelp stations for each sample date. Densities of total coliform (Total), fecal coliform (Fecal), and *Enterococcus* (Entero) bacteria are reported as CFU/100 mL; values for temperature (Temp, °C), transmissivity (XMS, ‰), dissolved oxygen (DO, mg/L), salinity (Sal, ppt) and pH were extracted from CTD profile data for depths closest to those at which the bacteriological samples were collected. Comments follow the data summary.

Station	Date	Time	Depth	Total	Fecal	Entero
A1	08 Oct 2024	758	1	<2	<2	<2
A1	08 Oct 2024	758	12	10e	<2	<2
A1	08 Oct 2024	758	18	80e	34e	4e
A1	15 Oct 2024	743	1	2e	<2	<2
A1	15 Oct 2024	743	12	<20	6e	<2
A1	15 Oct 2024	743	18	80e	16e	4e
A1	21 Oct 2024	756	1	<2	<2	<2
A1	21 Oct 2024	756	12	<2	<2	2e
A1	21 Oct 2024	756	18	8e	4e	<2
A1	30 Oct 2024	826	1	<2	<2	<2
A1	30 Oct 2024	826	12	2e	6e	<2
A1	30 Oct 2024	826	18	22e	4e	<2
A6	08 Oct 2024	825	1	<2	<2	<2
A6	08 Oct 2024	825	12	<20	<2	<2
A6	08 Oct 2024	825	18	48	18e	2e
A6	15 Oct 2024	808	1	<2	<2	<2
A6	15 Oct 2024	808	12	6e	<2	<2
A6	15 Oct 2024	808	18	<20	<2	<2
A6	21 Oct 2024	826	1	<2	<2	<2
A6	21 Oct 2024	826	12	<2	<2	<2
A6	21 Oct 2024	826	18	2e	<2	<2
A6	30 Oct 2024	852	1	<20	<2	<2
A6	30 Oct 2024	852	12	<2	2e	<2
A6	30 Oct 2024	852	18	8e	<2	<2
A7	08 Oct 2024	814	1	<2	4e	<2
A7	08 Oct 2024	814	12	8e	<2	<2
A7	08 Oct 2024	814	18	120e	42	2e
A7	15 Oct 2024	756	1	4e	<2	<2
A7	15 Oct 2024	756	12	10e	2e	2e
A7	15 Oct 2024	756	18	28e	6e	2e
A7	21 Oct 2024	807	1	<2	<2	<2
A7	21 Oct 2024	807	12	<2	<2	<2
A7	21 Oct 2024	807	18	6e	4e	<2
A7	30 Oct 2024	841	1	2e	<2	<2
A7	30 Oct 2024	841	12	2e	<2	<2
A7	30 Oct 2024	841	18	180e	32e	2e
C4	08 Oct 2024	935	1	<2	<2	<2
C4	08 Oct 2024	935	3	2e	<2	<2
C4	08 Oct 2024	935	9	2e	<2	<2

Station	Date	Time	Depth	Total	Fecal	Enteroc
C4	15 Oct 2024	916	1	<2	<2	<2
C4	15 Oct 2024	916	3	<2	<2	<2
C4	15 Oct 2024	916	9	8e	<2	<2
C4	21 Oct 2024	935	1	<2	<2	<2
C4	21 Oct 2024	935	3	<2	<2	<2
C4	21 Oct 2024	935	9	<2	<2	<2
C4	30 Oct 2024	959	1	<2	<2	<2
C4	30 Oct 2024	959	3	<2	<2	<2
C4	30 Oct 2024	959	9	<2	<2	<2
C5	08 Oct 2024	924	1	2e	<2	<2
C5	08 Oct 2024	924	3	<2	<2	<2
C5	08 Oct 2024	924	9	<20	<2	<2
C5	15 Oct 2024	906	1	30e	<2	<2
C5	15 Oct 2024	906	3	<2	<2	<2
C5	15 Oct 2024	906	9	2e	<2	<2
C5	21 Oct 2024	924	1	<2	<2	<2
C5	21 Oct 2024	924	3	2e	<2	<2
C5	21 Oct 2024	924	9	2e	<2	<2
C5	30 Oct 2024	948	1	<2	<2	<2
C5	30 Oct 2024	948	3	<20	2e	<2
C5	30 Oct 2024	948	9	6e	2e	<2
C6	08 Oct 2024	913	1	<2	<2	<2
C6	08 Oct 2024	913	3	<2	<2	<2
C6	08 Oct 2024	913	9	<2	<2	<2
C6	15 Oct 2024	856	1	<2	<2	<2
C6	15 Oct 2024	856	3	<2	2e	<2
C6	15 Oct 2024	856	9	<2	<2	<2
C6	21 Oct 2024	913	1	<2	<2	<2
C6	21 Oct 2024	913	3	2e	<2	<2
C6	21 Oct 2024	913	9	<2	<2	<2
C6	30 Oct 2024	937	1	<2	<2	<2
C6	30 Oct 2024	937	3	<20	<2	<2
C6	30 Oct 2024	937	9	2e	<2	<2
C7	08 Oct 2024	842	1	2e	<2	<2
C7	08 Oct 2024	842	12	<2	2e	<2
C7	08 Oct 2024	842	18	<2	<2	<2
C7	15 Oct 2024	827	1	<2	<2	<2
C7	15 Oct 2024	827	12	2e	<2	<2
C7	15 Oct 2024	827	18	6e	<2	<2
C7	21 Oct 2024	840	1	<2	<2	<2
C7	21 Oct 2024	840	12	<2	<2	<2
C7	21 Oct 2024	840	18	2e	<2	<2
C7	30 Oct 2024	906	1	4e	<2	<2
C7	30 Oct 2024	906	12	<2	<2	<2
C7	30 Oct 2024	906	18	4e	<2	<2

Station	Date	Time	Depth	Total	Fecal	Entero
C8	08 Oct 2024	853	1	2e	<2	<2
C8	08 Oct 2024	853	12	<2	<2	<2
C8	08 Oct 2024	853	18	2e	<2	2e
C8	15 Oct 2024	837	1	<2	<2	<2
C8	15 Oct 2024	837	12	<2	<2	<2
C8	15 Oct 2024	837	18	8e	2e	<2
C8	21 Oct 2024	850	1	<2	<2	2e
C8	21 Oct 2024	850	12	<2	<2	<2
C8	21 Oct 2024	850	18	<2	<2	<2
C8	30 Oct 2024	917	1	<2	<2	2e
C8	30 Oct 2024	917	12	<2	<2	<2
C8	30 Oct 2024	917	18	<2	<2	<2

ns = not sampled
ND = no data

Table 3.9

Summary of visual observations made during the month for each PLOO kelp station by sample date.

Station	Date	Parameter	Value
A1	08 Oct 2024	Arrive Time	758
A1	08 Oct 2024	Depart Time	810
A1	08 Oct 2024	Air Temp (C)	14.9
A1	08 Oct 2024	Visibility (mi)	0
A1	08 Oct 2024	Wind Speed (kts)	9.9
A1	08 Oct 2024	Wind Dir	NW
A1	08 Oct 2024	Sea State	Wind Ripples
A1	08 Oct 2024	High Tide Time	1148
A1	08 Oct 2024	Low Tide Time	2018
A1	08 Oct 2024	Comments	Kelp Debris; Niskin 2 broke but able to get sample first
A1	15 Oct 2024	Arrive Time	743
A1	15 Oct 2024	Depart Time	749
A1	15 Oct 2024	Air Temp (C)	17.3
A1	15 Oct 2024	Visibility (mi)	7
A1	15 Oct 2024	Wind Speed (kts)	6.3
A1	15 Oct 2024	Wind Dir	NW
A1	15 Oct 2024	Sea State	Regular Swell
A1	15 Oct 2024	High Tide Time	812
A1	15 Oct 2024	Low Tide Time	154
A1	15 Oct 2024	Comments	
A1	21 Oct 2024	Arrive Time	756
A1	21 Oct 2024	Depart Time	759
A1	21 Oct 2024	Air Temp (C)	16.9
A1	21 Oct 2024	Visibility (mi)	10
A1	21 Oct 2024	Wind Speed (kts)	2.2
A1	21 Oct 2024	Wind Dir	NE
A1	21 Oct 2024	Sea State	Wind Ripples
A1	21 Oct 2024	High Tide Time	1148
A1	21 Oct 2024	Low Tide Time	1930
A1	21 Oct 2024	Comments	Kelp; Kelp Debris; Lobster Floats
A1	30 Oct 2024	Arrive Time	826
A1	30 Oct 2024	Depart Time	837
A1	30 Oct 2024	Air Temp (C)	13.8
A1	30 Oct 2024	Visibility (mi)	8
A1	30 Oct 2024	Wind Speed (kts)	7.2
A1	30 Oct 2024	Wind Dir	E
A1	30 Oct 2024	Sea State	Confused Swell
A1	30 Oct 2024	High Tide Time	818
A1	30 Oct 2024	Low Tide Time	1454
A1	30 Oct 2024	Comments	Kelp Debris; Lobster Floats
C4	08 Oct 2024	Arrive Time	935
C4	08 Oct 2024	Depart Time	938
C4	08 Oct 2024	Air Temp (C)	15.3
C4	08 Oct 2024	Visibility (mi)	0
C4	08 Oct 2024	Wind Speed (kts)	8.6
C4	08 Oct 2024	Wind Dir	N
C4	08 Oct 2024	Sea State	Wind Ripples
C4	08 Oct 2024	High Tide Time	1148
C4	08 Oct 2024	Low Tide Time	2018
C4	08 Oct 2024	Comments	
C4	15 Oct 2024	Arrive Time	916

Station	Date	Parameter	Value
C4	15 Oct 2024	Depart Time	920
C4	15 Oct 2024	Air Temp (C)	17.2
C4	15 Oct 2024	Visibility (mi)	7
C4	15 Oct 2024	Wind Speed (kts)	9.8
C4	15 Oct 2024	Wind Dir	S
C4	15 Oct 2024	Sea State	Regular Swell
C4	15 Oct 2024	High Tide Time	812
C4	15 Oct 2024	Low Tide Time	154
C4	15 Oct 2024	Comments	
C4	21 Oct 2024	Arrive Time	935
C4	21 Oct 2024	Depart Time	937
C4	21 Oct 2024	Air Temp (C)	17.9
C4	21 Oct 2024	Visibility (mi)	10
C4	21 Oct 2024	Wind Speed (kts)	0.3
C4	21 Oct 2024	Wind Dir	E
C4	21 Oct 2024	Sea State	Wind Ripples
C4	21 Oct 2024	High Tide Time	1148
C4	21 Oct 2024	Low Tide Time	1930
C4	21 Oct 2024	Comments	Kelp; Kelp Debris; Lobster Floats
C4	30 Oct 2024	Arrive Time	959
C4	30 Oct 2024	Depart Time	1002
C4	30 Oct 2024	Air Temp (C)	15.1
C4	30 Oct 2024	Visibility (mi)	8
C4	30 Oct 2024	Wind Speed (kts)	3.9
C4	30 Oct 2024	Wind Dir	SE
C4	30 Oct 2024	Sea State	Confused Swell
C4	30 Oct 2024	High Tide Time	818
C4	30 Oct 2024	Low Tide Time	1454
C4	30 Oct 2024	Comments	Kelp; Kelp Debris; Lobster Floats
A7	08 Oct 2024	Arrive Time	814
A7	08 Oct 2024	Depart Time	818
A7	08 Oct 2024	Air Temp (C)	14.7
A7	08 Oct 2024	Visibility (mi)	0
A7	08 Oct 2024	Wind Speed (kts)	6.9
A7	08 Oct 2024	Wind Dir	NE
A7	08 Oct 2024	Sea State	Wind Ripples
A7	08 Oct 2024	High Tide Time	1148
A7	08 Oct 2024	Low Tide Time	2018
A7	08 Oct 2024	Comments	Kelp Debris
A7	15 Oct 2024	Arrive Time	756
A7	15 Oct 2024	Depart Time	802
A7	15 Oct 2024	Air Temp (C)	17.4
A7	15 Oct 2024	Visibility (mi)	7
A7	15 Oct 2024	Wind Speed (kts)	5.9
A7	15 Oct 2024	Wind Dir	N
A7	15 Oct 2024	Sea State	Regular Swell
A7	15 Oct 2024	High Tide Time	812
A7	15 Oct 2024	Low Tide Time	154
A7	15 Oct 2024	Comments	
A7	21 Oct 2024	Arrive Time	807
A7	21 Oct 2024	Depart Time	811
A7	21 Oct 2024	Air Temp (C)	17.5
A7	21 Oct 2024	Visibility (mi)	10
A7	21 Oct 2024	Wind Speed (kts)	0
A7	21 Oct 2024	Wind Dir	NE
A7	21 Oct 2024	Sea State	Wind Ripples

Station	Date	Parameter	Value
A7	21 Oct 2024	High Tide Time	1148
A7	21 Oct 2024	Low Tide Time	1930
A7	21 Oct 2024	Comments	Sea lions everywhere!; Kelp Debris; Seagrass; Lobster Floats
A7	30 Oct 2024	Arrive Time	841
A7	30 Oct 2024	Depart Time	847
A7	30 Oct 2024	Air Temp (C)	14.5
A7	30 Oct 2024	Visibility (mi)	8
A7	30 Oct 2024	Wind Speed (kts)	5
A7	30 Oct 2024	Wind Dir	SE
A7	30 Oct 2024	Sea State	Confused Swell
A7	30 Oct 2024	High Tide Time	818
A7	30 Oct 2024	Low Tide Time	1454
A7	30 Oct 2024	Comments	Kelp Debris; Lobster Floats
C5	08 Oct 2024	Arrive Time	924
C5	08 Oct 2024	Depart Time	927
C5	08 Oct 2024	Air Temp (C)	15.1
C5	08 Oct 2024	Visibility (mi)	0
C5	08 Oct 2024	Wind Speed (kts)	8.1
C5	08 Oct 2024	Wind Dir	N
C5	08 Oct 2024	Sea State	Wind Ripples
C5	08 Oct 2024	High Tide Time	1148
C5	08 Oct 2024	Low Tide Time	2018
C5	08 Oct 2024	Comments	Kelp; Kelp Debris
C5	15 Oct 2024	Arrive Time	906
C5	15 Oct 2024	Depart Time	910
C5	15 Oct 2024	Air Temp (C)	17.5
C5	15 Oct 2024	Visibility (mi)	7
C5	15 Oct 2024	Wind Speed (kts)	8
C5	15 Oct 2024	Wind Dir	SW
C5	15 Oct 2024	Sea State	Regular Swell
C5	15 Oct 2024	High Tide Time	812
C5	15 Oct 2024	Low Tide Time	154
C5	15 Oct 2024	Comments	
C5	21 Oct 2024	Arrive Time	924
C5	21 Oct 2024	Depart Time	928
C5	21 Oct 2024	Air Temp (C)	17.9
C5	21 Oct 2024	Visibility (mi)	10
C5	21 Oct 2024	Wind Speed (kts)	0
C5	21 Oct 2024	Wind Dir	NW
C5	21 Oct 2024	Sea State	Wind Ripples
C5	21 Oct 2024	High Tide Time	1148
C5	21 Oct 2024	Low Tide Time	1930
C5	21 Oct 2024	Comments	Kelp Debris; Seagrass; Lobster Floats
C5	30 Oct 2024	Arrive Time	948
C5	30 Oct 2024	Depart Time	953
C5	30 Oct 2024	Air Temp (C)	16
C5	30 Oct 2024	Visibility (mi)	8
C5	30 Oct 2024	Wind Speed (kts)	4.9
C5	30 Oct 2024	Wind Dir	N
C5	30 Oct 2024	Sea State	Confused Swell
C5	30 Oct 2024	High Tide Time	818
C5	30 Oct 2024	Low Tide Time	1454
C5	30 Oct 2024	Comments	Kelp; Kelp Debris; Lobster Floats
A6	08 Oct 2024	Arrive Time	825
A6	08 Oct 2024	Depart Time	831

Station	Date	Parameter	Value
A6	08 Oct 2024	Air Temp (C)	14.8
A6	08 Oct 2024	Visibility (mi)	0
A6	08 Oct 2024	Wind Speed (kts)	10.2
A6	08 Oct 2024	Wind Dir	NW
A6	08 Oct 2024	Sea State	Wind Ripples
A6	08 Oct 2024	High Tide Time	1148
A6	08 Oct 2024	Low Tide Time	2018
A6	08 Oct 2024	Comments	Kelp; Kelp Debris
A6	15 Oct 2024	Arrive Time	808
A6	15 Oct 2024	Depart Time	817
A6	15 Oct 2024	Air Temp (C)	17.5
A6	15 Oct 2024	Visibility (mi)	7
A6	15 Oct 2024	Wind Speed (kts)	4.2
A6	15 Oct 2024	Wind Dir	N
A6	15 Oct 2024	Sea State	Regular Swell
A6	15 Oct 2024	High Tide Time	812
A6	15 Oct 2024	Low Tide Time	154
A6	15 Oct 2024	Comments	
A6	21 Oct 2024	Arrive Time	826
A6	21 Oct 2024	Depart Time	830
A6	21 Oct 2024	Air Temp (C)	17.5
A6	21 Oct 2024	Visibility (mi)	10
A6	21 Oct 2024	Wind Speed (kts)	0
A6	21 Oct 2024	Wind Dir	W
A6	21 Oct 2024	Sea State	Wind Ripples
A6	21 Oct 2024	High Tide Time	1148
A6	21 Oct 2024	Low Tide Time	1930
A6	21 Oct 2024	Comments	Kelp Debris; Seagrass; Lobster Floats
A6	30 Oct 2024	Arrive Time	852
A6	30 Oct 2024	Depart Time	858
A6	30 Oct 2024	Air Temp (C)	15.4
A6	30 Oct 2024	Visibility (mi)	8
A6	30 Oct 2024	Wind Speed (kts)	4.8
A6	30 Oct 2024	Wind Dir	NE
A6	30 Oct 2024	Sea State	Confused Swell
A6	30 Oct 2024	High Tide Time	818
A6	30 Oct 2024	Low Tide Time	1454
A6	30 Oct 2024	Comments	Lobster Floats
C6	08 Oct 2024	Arrive Time	913
C6	08 Oct 2024	Depart Time	915
C6	08 Oct 2024	Air Temp (C)	15
C6	08 Oct 2024	Visibility (mi)	0
C6	08 Oct 2024	Wind Speed (kts)	6.7
C6	08 Oct 2024	Wind Dir	N
C6	08 Oct 2024	Sea State	Wind Ripples
C6	08 Oct 2024	High Tide Time	1148
C6	08 Oct 2024	Low Tide Time	2018
C6	08 Oct 2024	Comments	
C6	15 Oct 2024	Arrive Time	856
C6	15 Oct 2024	Depart Time	900
C6	15 Oct 2024	Air Temp (C)	17.5
C6	15 Oct 2024	Visibility (mi)	7
C6	15 Oct 2024	Wind Speed (kts)	4.4
C6	15 Oct 2024	Wind Dir	SW
C6	15 Oct 2024	Sea State	Regular Swell
C6	15 Oct 2024	High Tide Time	812

Station	Date	Parameter	Value
C6	15 Oct 2024	Low Tide Time	154
C6	15 Oct 2024	Comments	
C6	21 Oct 2024	Arrive Time	913
C6	21 Oct 2024	Depart Time	916
C6	21 Oct 2024	Air Temp (C)	17.7
C6	21 Oct 2024	Visibility (mi)	10
C6	21 Oct 2024	Wind Speed (kts)	0.4
C6	21 Oct 2024	Wind Dir	N
C6	21 Oct 2024	Sea State	Wind Ripples
C6	21 Oct 2024	High Tide Time	1148
C6	21 Oct 2024	Low Tide Time	1930
C6	21 Oct 2024	Comments	Lobster Floats
C6	30 Oct 2024	Arrive Time	937
C6	30 Oct 2024	Depart Time	945
C6	30 Oct 2024	Air Temp (C)	16
C6	30 Oct 2024	Visibility (mi)	8
C6	30 Oct 2024	Wind Speed (kts)	4
C6	30 Oct 2024	Wind Dir	W
C6	30 Oct 2024	Sea State	Confused Swell
C6	30 Oct 2024	High Tide Time	818
C6	30 Oct 2024	Low Tide Time	1454
C6	30 Oct 2024	Comments	Kelp Debris; Lobster Floats
C7	08 Oct 2024	Arrive Time	842
C7	08 Oct 2024	Depart Time	846
C7	08 Oct 2024	Air Temp (C)	14.8
C7	08 Oct 2024	Visibility (mi)	0
C7	08 Oct 2024	Wind Speed (kts)	5.7
C7	08 Oct 2024	Wind Dir	NE
C7	08 Oct 2024	Sea State	Wind Ripples
C7	08 Oct 2024	High Tide Time	1148
C7	08 Oct 2024	Low Tide Time	2018
C7	08 Oct 2024	Comments	
C7	15 Oct 2024	Arrive Time	827
C7	15 Oct 2024	Depart Time	831
C7	15 Oct 2024	Air Temp (C)	17.6
C7	15 Oct 2024	Visibility (mi)	7
C7	15 Oct 2024	Wind Speed (kts)	12.4
C7	15 Oct 2024	Wind Dir	NW
C7	15 Oct 2024	Sea State	Regular Swell
C7	15 Oct 2024	High Tide Time	812
C7	15 Oct 2024	Low Tide Time	154
C7	15 Oct 2024	Comments	
C7	21 Oct 2024	Arrive Time	840
C7	21 Oct 2024	Depart Time	843
C7	21 Oct 2024	Air Temp (C)	17.8
C7	21 Oct 2024	Visibility (mi)	10
C7	21 Oct 2024	Wind Speed (kts)	0
C7	21 Oct 2024	Wind Dir	W
C7	21 Oct 2024	Sea State	Wind Ripples
C7	21 Oct 2024	High Tide Time	1148
C7	21 Oct 2024	Low Tide Time	1930
C7	21 Oct 2024	Comments	Seagrass; Lobster Floats
C7	30 Oct 2024	Arrive Time	906
C7	30 Oct 2024	Depart Time	911
C7	30 Oct 2024	Air Temp (C)	15.8

Station	Date	Parameter	Value
C7	30 Oct 2024	Visibility (mi)	8
C7	30 Oct 2024	Wind Speed (kts)	5
C7	30 Oct 2024	Wind Dir	N
C7	30 Oct 2024	Sea State	Confused Swell
C7	30 Oct 2024	High Tide Time	818
C7	30 Oct 2024	Low Tide Time	1454
C7	30 Oct 2024	Comments	Lobster Floats
C8	08 Oct 2024	Arrive Time	853
C8	08 Oct 2024	Depart Time	856
C8	08 Oct 2024	Air Temp (C)	14.8
C8	08 Oct 2024	Visibility (mi)	0
C8	08 Oct 2024	Wind Speed (kts)	3.4
C8	08 Oct 2024	Wind Dir	N
C8	08 Oct 2024	Sea State	Wind Ripples
C8	08 Oct 2024	High Tide Time	1148
C8	08 Oct 2024	Low Tide Time	2018
C8	08 Oct 2024	Comments	
C8	15 Oct 2024	Arrive Time	837
C8	15 Oct 2024	Depart Time	841
C8	15 Oct 2024	Air Temp (C)	17.6
C8	15 Oct 2024	Visibility (mi)	7
C8	15 Oct 2024	Wind Speed (kts)	8.1
C8	15 Oct 2024	Wind Dir	N
C8	15 Oct 2024	Sea State	Regular Swell
C8	15 Oct 2024	High Tide Time	812
C8	15 Oct 2024	Low Tide Time	154
C8	15 Oct 2024	Comments	
C8	21 Oct 2024	Arrive Time	850
C8	21 Oct 2024	Depart Time	854
C8	21 Oct 2024	Air Temp (C)	17.6
C8	21 Oct 2024	Visibility (mi)	10
C8	21 Oct 2024	Wind Speed (kts)	0
C8	21 Oct 2024	Wind Dir	W
C8	21 Oct 2024	Sea State	Wind Ripples
C8	21 Oct 2024	High Tide Time	1148
C8	21 Oct 2024	Low Tide Time	1930
C8	21 Oct 2024	Comments	Lobster Floats
C8	30 Oct 2024	Arrive Time	917
C8	30 Oct 2024	Depart Time	925
C8	30 Oct 2024	Air Temp (C)	15.5
C8	30 Oct 2024	Visibility (mi)	8
C8	30 Oct 2024	Wind Speed (kts)	8
C8	30 Oct 2024	Wind Dir	N
C8	30 Oct 2024	Sea State	Confused Swell
C8	30 Oct 2024	High Tide Time	818
C8	30 Oct 2024	Low Tide Time	1454
C8	30 Oct 2024	Comments	

Comments

date	station	depth	parmcode	comments
08-Oct-2024	A1	1		Found 1 colonies on non-selective TSA plate, but none on selective mEI plate. The results not likely affected.
08-Oct-2024	A1	12		Found 1 colonies on non-selective TSA plate, but none on selective mEI plate. The results not likely affected.
08-Oct-2024	A1	18		Found 1 colonies on non-selective TSA plate, but none on selective mEI plate. The results not likely affected.
08-Oct-2024	A6	1		Found 1 colonies on non-selective TSA plate, but none on selective mEI plate. The results not likely affected.
08-Oct-2024	A6	12		Found 1 colonies on non-selective TSA plate, but none on selective mEI plate. The results not likely affected.
08-Oct-2024	A6	18		Found 1 colonies on non-selective TSA plate, but none on selective mEI plate. The results not likely affected.
08-Oct-2024	C4	1		Found 1 colonies on non-selective TSA plate, but none on selective mEI plate. The results not likely affected.
08-Oct-2024	C4	3		Found 1 colonies on non-selective TSA plate, but none on selective mEI plate. The results not likely affected.
08-Oct-2024	C4	9		Found 1 colonies on non-selective TSA plate, but none on selective mEI plate. The results not likely affected.

Table 3.10

Summary of CTD profile data from the PLOO kelp stations for each sample date.

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
A1	08 Oct 2024	1	16.10	94.16	8.7	33.22	8.1	24.4	0.97
A1	08 Oct 2024	2	16.03	93.89	8.6	33.21	8.1	24.4	1.01
A1	08 Oct 2024	3	15.22	94.50	8.3	33.26	8.1	24.6	1.18
A1	08 Oct 2024	4	14.05	94.61	8.0	33.25	8.1	24.8	1.77
A1	08 Oct 2024	5	13.62	93.95	7.7	33.19	8.0	24.9	2.29
A1	08 Oct 2024	6	13.32	93.77	7.4	33.20	8.0	24.9	2.32
A1	08 Oct 2024	7	13.15	94.37	7.3	33.20	8.0	25.0	2.04
A1	08 Oct 2024	8	13.13	95.96	7.2	33.22	8.0	25.0	1.54
A1	08 Oct 2024	9	13.10	96.65	7.1	33.22	8.0	25.0	1.22
A1	08 Oct 2024	10	13.02	97.03	7.0	33.22	8.0	25.0	1.02
A1	08 Oct 2024	11	13.02	97.09	7.0	33.23	8.0	25.0	0.90
A1	08 Oct 2024	12	12.98	97.07	6.9	33.23	8.0	25.0	0.85
A1	08 Oct 2024	13	12.84	97.23	6.8	33.24	8.0	25.1	0.65
A1	08 Oct 2024	14	12.72	97.28	6.8	33.24	8.0	25.1	0.58
A1	08 Oct 2024	15	12.69	97.48	6.7	33.25	7.9	25.1	0.55
A1	08 Oct 2024	16	12.50	97.24	6.6	33.26	7.9	25.1	0.48
A1	08 Oct 2024	17	12.47	96.83	6.5	33.27	7.9	25.2	0.44
A1	08 Oct 2024	18	12.50	96.41	6.4	33.26	7.9	25.1	0.48
A1	08 Oct 2024	19	12.46	96.35	6.4	33.27	7.9	25.2	0.47
A1	08 Oct 2024	20	12.46	96.22	6.4	33.27	7.9	25.2	0.44
A1	15 Oct 2024	1	16.94	90.37	8.2	33.28	8.2	24.2	1.31
A1	15 Oct 2024	2	16.92	90.37	8.2	33.28	8.2	24.2	1.35
A1	15 Oct 2024	3	16.83	90.32	8.1	33.28	8.2	24.2	1.46
A1	15 Oct 2024	4	16.65	89.77	8.1	33.28	8.2	24.3	1.61
A1	15 Oct 2024	5	16.41	89.24	8.0	33.27	8.2	24.3	1.84
A1	15 Oct 2024	6	16.11	87.97	7.9	33.27	8.2	24.4	2.29
A1	15 Oct 2024	7	15.58	86.93	7.7	33.27	8.1	24.5	2.52
A1	15 Oct 2024	8	14.24	86.71	7.7	33.27	8.1	24.8	2.51
A1	15 Oct 2024	9	14.02	88.66	7.3	33.24	8.1	24.8	1.85
A1	15 Oct 2024	10	12.57	90.48	6.9	33.31	8.1	25.2	1.29
A1	15 Oct 2024	11	12.16	95.26	6.6	33.27	8.1	25.2	0.90
A1	15 Oct 2024	12	12.00	96.07	6.4	33.27	8.0	25.2	0.62
A1	15 Oct 2024	13	11.88	96.44	6.3	33.28	8.0	25.3	0.55
A1	15 Oct 2024	14	11.86	96.48	6.3	33.28	8.0	25.3	0.51
A1	15 Oct 2024	15	11.80	94.84	6.2	33.29	8.0	25.3	0.49
A1	15 Oct 2024	16	11.72	95.40	6.1	33.30	8.0	25.3	0.47
A1	15 Oct 2024	17	11.69	95.42	6.0	33.31	8.0	25.3	0.43
A1	15 Oct 2024	18	11.69	94.86	6.0	33.31	8.0	25.3	0.41
A1	15 Oct 2024	19	11.68	94.66	6.0	33.32	8.0	25.3	0.40
A1	21 Oct 2024	1	16.17	91.42	8.7	33.25	8.2	24.4	1.79
A1	21 Oct 2024	2	16.16	91.40	8.7	33.24	8.2	24.4	1.92
A1	21 Oct 2024	3	16.12	91.16	8.7	33.24	8.2	24.4	2.08
A1	21 Oct 2024	4	16.11	91.06	8.7	33.24	8.2	24.4	2.22
A1	21 Oct 2024	5	16.11	90.99	8.6	33.24	8.2	24.4	2.30
A1	21 Oct 2024	6	16.06	90.93	8.6	33.24	8.2	24.4	2.31
A1	21 Oct 2024	7	16.03	91.32	8.7	33.24	8.2	24.4	2.27
A1	21 Oct 2024	8	15.99	91.57	8.6	33.24	8.2	24.4	2.24
A1	21 Oct 2024	9	15.71	91.70	8.5	33.25	8.2	24.5	2.29
A1	21 Oct 2024	10	15.47	91.83	8.4	33.25	8.2	24.5	2.50
A1	21 Oct 2024	11	15.33	91.88	8.3	33.24	8.2	24.5	2.54
A1	21 Oct 2024	12	15.27	91.79	8.2	33.24	8.2	24.6	2.60
A1	21 Oct 2024	13	15.11	91.96	8.1	33.25	8.2	24.6	2.54
A1	21 Oct 2024	14	14.91	92.31	7.9	33.24	8.2	24.6	2.28

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
A1	21 Oct 2024	15	14.74	93.02	7.7	33.24	8.2	24.7	1.78
A1	21 Oct 2024	16	14.32	93.84	7.4	33.25	8.1	24.8	1.22
A1	21 Oct 2024	17	13.98	94.59	7.2	33.24	8.1	24.8	0.99
A1	21 Oct 2024	18	13.77	94.49	7.1	33.23	8.1	24.9	1.02
A1	21 Oct 2024	19	13.72	94.61	7.1	33.22	8.1	24.9	1.14
A1	30 Oct 2024	1	16.02	89.83	7.5	33.27	8.0	24.4	0.90
A1	30 Oct 2024	2	15.99	89.34	7.4	33.26	8.0	24.4	0.92
A1	30 Oct 2024	3	15.67	89.46	7.3	33.28	8.0	24.5	0.93
A1	30 Oct 2024	4	15.19	89.77	7.2	33.25	8.0	24.6	0.84
A1	30 Oct 2024	5	14.71	92.02	7.0	33.23	8.0	24.7	0.66
A1	30 Oct 2024	6	14.58	93.33	7.0	33.22	8.0	24.7	0.54
A1	30 Oct 2024	7	14.48	93.53	6.9	33.22	8.0	24.7	0.49
A1	30 Oct 2024	8	14.45	93.85	6.9	33.21	8.0	24.7	0.43
A1	30 Oct 2024	9	14.41	94.20	6.9	33.22	8.0	24.7	0.44
A1	30 Oct 2024	10	14.28	94.05	6.8	33.22	7.9	24.8	0.41
A1	30 Oct 2024	11	14.12	93.63	6.7	33.23	7.9	24.8	0.38
A1	30 Oct 2024	12	14.00	92.18	6.6	33.23	7.9	24.8	0.31
A1	30 Oct 2024	13	13.86	92.01	6.5	33.24	7.9	24.9	0.30
A1	30 Oct 2024	14	13.50	92.70	6.3	33.25	7.9	24.9	0.31
A1	30 Oct 2024	15	12.74	91.96	6.2	33.28	7.9	25.1	0.28
A1	30 Oct 2024	16	12.65	94.00	6.1	33.26	7.9	25.1	0.29
A1	30 Oct 2024	17	12.57	95.42	6.0	33.27	7.9	25.1	0.29
A1	30 Oct 2024	18	12.43	95.49	6.0	33.28	7.9	25.2	0.43
A1	30 Oct 2024	19	12.38	94.61	5.9	33.28	7.9	25.2	0.77
C4	08 Oct 2024	1	16.63	89.25	7.8	33.22	8.1	24.2	0.69
C4	08 Oct 2024	2	16.60	90.26	7.8	33.22	8.1	24.2	0.74
C4	08 Oct 2024	3	16.34	90.17	8.0	33.23	8.1	24.3	0.93
C4	08 Oct 2024	4	16.23	90.61	8.0	33.22	8.1	24.3	1.25
C4	08 Oct 2024	5	15.71	91.24	7.9	33.24	8.1	24.5	1.43
C4	08 Oct 2024	6	15.51	92.06	7.7	33.21	8.1	24.5	1.37
C4	08 Oct 2024	7	15.16	92.73	7.5	33.22	8.1	24.6	1.14
C4	08 Oct 2024	8	14.91	93.38	7.3	33.20	8.1	24.6	0.82
C4	08 Oct 2024	9	14.69	94.21	7.2	33.22	8.1	24.7	0.67
C4	08 Oct 2024	10	14.48	94.05	7.1	33.20	8.0	24.7	0.47
C4	08 Oct 2024	11	14.44	92.28	7.1	33.20	8.0	24.7	0.37
C4	08 Oct 2024	12	14.35	90.80	7.1	33.20	8.0	24.7	0.30
C4	15 Oct 2024	1	16.34	82.72	7.8	33.27	8.2	24.3	1.23
C4	15 Oct 2024	2	15.91	82.65	7.9	33.27	8.2	24.4	1.58
C4	15 Oct 2024	3	15.40	84.36	8.0	33.26	8.2	24.5	2.29
C4	15 Oct 2024	4	15.08	86.36	7.8	33.26	8.2	24.6	2.52
C4	15 Oct 2024	5	14.65	87.17	7.4	33.26	8.2	24.7	2.27
C4	15 Oct 2024	6	13.77	87.30	7.0	33.29	8.2	24.9	1.65
C4	15 Oct 2024	7	12.84	88.31	6.7	33.27	8.1	25.1	1.09
C4	15 Oct 2024	8	12.68	89.46	6.5	33.26	8.1	25.1	0.75
C4	15 Oct 2024	9	12.70	87.73	6.4	33.25	8.1	25.1	0.62
C4	15 Oct 2024	10	12.62	79.94	6.3	33.26	8.1	25.1	0.61
C4	15 Oct 2024	11	12.62	71.94	6.3	33.26	8.0	25.1	0.58
C4	15 Oct 2024	12	12.62	71.48	6.2	33.26	8.0	25.1	0.54
C4	21 Oct 2024	1	16.27	90.85	8.7	33.26	8.2	24.3	1.06
C4	21 Oct 2024	2	16.22	90.80	8.7	33.26	8.2	24.4	1.04
C4	21 Oct 2024	3	16.14	90.40	8.7	33.25	8.2	24.4	1.39
C4	21 Oct 2024	4	16.07	89.90	8.6	33.25	8.2	24.4	1.68
C4	21 Oct 2024	5	16.03	89.79	8.6	33.24	8.2	24.4	1.88
C4	21 Oct 2024	6	15.93	90.18	8.4	33.25	8.2	24.4	2.09
C4	21 Oct 2024	7	15.88	90.59	8.2	33.25	8.2	24.4	1.96
C4	21 Oct 2024	8	15.83	92.08	8.1	33.26	8.2	24.4	1.64
C4	21 Oct 2024	9	15.75	92.28	7.9	33.26	8.2	24.5	1.26

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
C4	21 Oct 2024	10	15.48	92.52	7.6	33.27	8.2	24.5	0.83
C4	21 Oct 2024	11	15.27	93.79	7.4	33.26	8.2	24.6	0.55
C4	21 Oct 2024	12	14.98	94.20	7.3	33.27	8.1	24.6	0.50
C4	30 Oct 2024	1	16.40	80.28	7.5	33.28	8.0	24.3	0.53
C4	30 Oct 2024	2	16.38	80.25	7.5	33.28	8.0	24.3	0.54
C4	30 Oct 2024	3	16.38	80.05	7.5	33.27	8.0	24.3	0.59
C4	30 Oct 2024	4	16.29	80.28	7.4	33.28	8.0	24.4	0.67
C4	30 Oct 2024	5	16.08	80.73	7.3	33.28	8.0	24.4	0.79
C4	30 Oct 2024	6	15.62	82.60	7.2	33.26	8.0	24.5	0.73
C4	30 Oct 2024	7	15.22	85.03	7.1	33.25	8.0	24.6	0.59
C4	30 Oct 2024	8	15.01	86.80	6.9	33.23	8.0	24.6	0.48
C4	30 Oct 2024	9	14.86	87.31	6.6	33.23	8.0	24.6	0.40
C4	30 Oct 2024	10	14.81	78.62	6.2	33.22	7.9	24.6	0.41
C4	30 Oct 2024	11	14.79	70.28	6.0	33.22	7.9	24.6	0.44
C4	30 Oct 2024	12	14.82	57.59	5.9	33.22	7.9	24.6	0.53
A7	08 Oct 2024	1	16.25	92.56	8.7	33.22	8.1	24.3	1.22
A7	08 Oct 2024	2	16.19	92.60	8.7	33.22	8.1	24.3	1.24
A7	08 Oct 2024	3	15.71	92.92	8.7	33.25	8.1	24.5	1.37
A7	08 Oct 2024	4	15.44	93.65	8.6	33.22	8.1	24.5	1.49
A7	08 Oct 2024	5	14.59	92.63	8.0	33.25	8.1	24.7	2.20
A7	08 Oct 2024	6	13.63	92.38	7.6	33.21	8.0	24.9	2.87
A7	08 Oct 2024	7	13.19	94.17	7.3	33.21	8.0	25.0	2.28
A7	08 Oct 2024	8	13.10	96.52	7.1	33.21	8.0	25.0	1.42
A7	08 Oct 2024	9	13.09	96.91	7.1	33.21	8.0	25.0	1.13
A7	08 Oct 2024	10	13.08	96.88	7.0	33.22	8.0	25.0	1.05
A7	08 Oct 2024	11	13.03	97.13	7.0	33.23	8.0	25.0	0.99
A7	08 Oct 2024	12	12.99	97.24	7.0	33.23	8.0	25.0	0.89
A7	08 Oct 2024	13	12.98	97.35	6.9	33.23	8.0	25.0	0.80
A7	08 Oct 2024	14	12.93	97.39	6.9	33.24	8.0	25.0	0.82
A7	08 Oct 2024	15	12.88	97.30	6.8	33.24	8.0	25.1	0.73
A7	08 Oct 2024	16	12.77	97.43	6.8	33.25	8.0	25.1	0.67
A7	08 Oct 2024	17	12.73	97.30	6.7	33.25	8.0	25.1	0.61
A7	08 Oct 2024	18	12.66	97.26	6.6	33.26	7.9	25.1	0.60
A7	08 Oct 2024	19	12.61	97.14	6.6	33.27	7.9	25.1	0.56
A7	15 Oct 2024	1	17.11	87.34	8.1	33.28	8.2	24.2	1.65
A7	15 Oct 2024	2	16.71	87.18	8.1	33.28	8.2	24.3	1.71
A7	15 Oct 2024	3	16.29	85.92	8.0	33.27	8.2	24.4	1.77
A7	15 Oct 2024	4	15.47	86.78	7.9	33.27	8.2	24.5	2.01
A7	15 Oct 2024	5	14.65	88.69	7.9	33.24	8.2	24.7	2.05
A7	15 Oct 2024	6	14.49	90.92	7.8	33.23	8.1	24.7	1.90
A7	15 Oct 2024	7	13.95	91.90	7.6	33.23	8.1	24.8	1.62
A7	15 Oct 2024	8	13.83	92.59	7.5	33.22	8.1	24.8	1.64
A7	15 Oct 2024	9	13.68	93.11	7.4	33.23	8.1	24.9	1.58
A7	15 Oct 2024	10	13.62	93.62	7.3	33.23	8.1	24.9	1.31
A7	15 Oct 2024	11	13.51	93.81	7.1	33.24	8.1	24.9	1.14
A7	15 Oct 2024	12	13.48	93.85	7.0	33.24	8.1	24.9	1.00
A7	15 Oct 2024	13	13.12	88.10	6.8	33.27	8.1	25.0	0.83
A7	15 Oct 2024	14	12.70	93.72	6.6	33.28	8.1	25.1	0.69
A7	15 Oct 2024	15	12.58	94.41	6.4	33.27	8.0	25.1	0.65
A7	15 Oct 2024	16	12.17	94.83	6.3	33.29	8.0	25.2	0.58
A7	15 Oct 2024	17	11.93	95.36	6.2	33.28	8.0	25.3	0.52
A7	15 Oct 2024	18	11.91	95.22	6.2	33.28	8.0	25.3	0.53
A7	15 Oct 2024	19	11.84	95.25	6.1	33.29	8.0	25.3	0.52
A7	21 Oct 2024	1	16.32	89.92	8.6	33.27	8.2	24.3	2.05
A7	21 Oct 2024	2	15.95	90.07	8.6	33.27	8.2	24.4	2.34
A7	21 Oct 2024	3	15.87	90.35	8.5	33.25	8.2	24.4	2.95
A7	21 Oct 2024	4	15.78	90.02	8.4	33.26	8.2	24.5	3.23

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
A7	21 Oct 2024	5	15.65	89.86	8.4	33.25	8.2	24.5	3.50
A7	21 Oct 2024	6	15.63	89.84	8.4	33.25	8.2	24.5	3.65
A7	21 Oct 2024	7	15.60	89.83	8.3	33.25	8.2	24.5	3.74
A7	21 Oct 2024	8	15.57	90.00	8.3	33.25	8.2	24.5	3.68
A7	21 Oct 2024	9	15.52	90.10	8.3	33.25	8.2	24.5	3.57
A7	21 Oct 2024	10	15.46	90.28	8.2	33.25	8.2	24.5	3.57
A7	21 Oct 2024	11	15.33	90.65	8.2	33.25	8.2	24.5	3.49
A7	21 Oct 2024	12	15.20	90.68	8.0	33.25	8.2	24.6	3.53
A7	21 Oct 2024	13	14.74	90.63	7.9	33.25	8.2	24.7	3.13
A7	21 Oct 2024	14	14.59	91.46	7.7	33.23	8.2	24.7	2.67
A7	21 Oct 2024	15	14.48	92.15	7.5	33.23	8.1	24.7	2.16
A7	21 Oct 2024	16	14.12	93.69	7.4	33.24	8.1	24.8	1.49
A7	21 Oct 2024	17	13.99	95.23	7.3	33.23	8.1	24.8	1.25
A7	21 Oct 2024	18	13.97	95.73	7.2	33.22	8.1	24.8	0.87
A7	30 Oct 2024	1	16.25	80.58	7.4	33.28	8.0	24.4	1.39
A7	30 Oct 2024	2	16.26	83.35	7.3	33.28	8.0	24.4	1.34
A7	30 Oct 2024	3	16.10	84.14	7.3	33.29	8.0	24.4	1.48
A7	30 Oct 2024	4	15.69	85.88	7.2	33.26	8.0	24.5	1.37
A7	30 Oct 2024	5	15.47	88.99	7.2	33.25	8.0	24.5	0.95
A7	30 Oct 2024	6	15.38	90.31	7.2	33.24	8.0	24.5	0.79
A7	30 Oct 2024	7	15.37	90.99	7.1	33.24	8.0	24.5	0.67
A7	30 Oct 2024	8	15.21	91.30	7.1	33.24	8.0	24.6	0.62
A7	30 Oct 2024	9	15.09	91.68	6.9	33.24	8.0	24.6	0.53
A7	30 Oct 2024	10	14.98	91.95	6.8	33.24	8.0	24.6	0.43
A7	30 Oct 2024	11	14.90	91.91	6.7	33.23	8.0	24.6	0.39
A7	30 Oct 2024	12	14.79	92.45	6.7	33.23	8.0	24.7	0.36
A7	30 Oct 2024	13	14.66	92.58	6.7	33.23	8.0	24.7	0.31
A7	30 Oct 2024	14	14.49	92.70	6.6	33.24	8.0	24.7	0.30
A7	30 Oct 2024	15	14.04	92.84	6.4	33.24	7.9	24.8	0.28
A7	30 Oct 2024	16	13.59	93.30	6.3	33.25	7.9	24.9	0.31
A7	30 Oct 2024	17	12.90	93.85	6.1	33.29	7.9	25.1	0.29
A7	30 Oct 2024	18	12.47	94.11	6.0	33.29	7.9	25.2	0.26
C5	08 Oct 2024	1	16.33	91.05	8.3	33.22	8.1	24.3	1.13
C5	08 Oct 2024	2	16.26	90.75	8.4	33.22	8.2	24.3	1.31
C5	08 Oct 2024	3	16.06	90.36	8.6	33.23	8.2	24.4	1.71
C5	08 Oct 2024	4	15.76	90.60	8.6	33.23	8.2	24.4	2.07
C5	08 Oct 2024	5	15.58	91.40	8.6	33.23	8.2	24.5	2.26
C5	08 Oct 2024	6	15.23	91.30	8.1	33.21	8.1	24.5	2.70
C5	08 Oct 2024	7	14.69	93.20	7.7	33.23	8.1	24.7	1.88
C5	08 Oct 2024	8	14.25	94.98	7.4	33.21	8.1	24.8	0.98
C5	08 Oct 2024	9	13.92	95.59	7.2	33.22	8.0	24.8	0.81
C5	08 Oct 2024	10	13.80	95.34	7.1	33.21	8.0	24.8	0.69
C5	08 Oct 2024	11	13.80	94.65	7.0	33.20	8.0	24.8	0.63
C5	15 Oct 2024	1	16.65	86.61	7.8	33.26	8.2	24.3	1.13
C5	15 Oct 2024	2	16.50	86.53	7.6	33.26	8.2	24.3	1.06
C5	15 Oct 2024	3	15.86	85.18	7.3	33.26	8.2	24.4	0.82
C5	15 Oct 2024	4	15.53	82.04	7.3	33.25	8.1	24.5	0.78
C5	15 Oct 2024	5	14.99	81.91	7.3	33.26	8.1	24.6	0.79
C5	15 Oct 2024	6	14.57	84.95	7.3	33.24	8.1	24.7	0.79
C5	15 Oct 2024	7	14.38	87.64	7.2	33.24	8.1	24.7	0.73
C5	15 Oct 2024	8	14.24	88.07	7.0	33.24	8.1	24.8	0.71
C5	15 Oct 2024	9	14.05	88.48	6.7	33.24	8.1	24.8	0.58
C5	15 Oct 2024	10	13.75	87.92	6.5	33.25	8.1	24.9	0.49
C5	15 Oct 2024	11	13.68	84.06	6.5	33.24	8.1	24.9	0.44
C5	21 Oct 2024	1	16.53	90.62	8.2	33.30	8.2	24.3	1.04
C5	21 Oct 2024	2	16.51	90.59	8.2	33.29	8.2	24.3	1.22
C5	21 Oct 2024	3	16.38	90.10	8.1	33.29	8.2	24.3	1.43

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
C5	21 Oct 2024	4	16.23	90.18	7.9	33.29	8.2	24.4	1.27
C5	21 Oct 2024	5	16.03	91.82	7.5	33.29	8.2	24.4	0.97
C5	21 Oct 2024	6	15.33	93.84	7.2	33.31	8.2	24.6	0.71
C5	21 Oct 2024	7	14.90	94.44	7.1	33.28	8.1	24.7	0.50
C5	21 Oct 2024	8	14.74	94.80	7.1	33.27	8.1	24.7	0.43
C5	21 Oct 2024	9	14.61	94.52	7.2	33.26	8.1	24.7	0.44
C5	21 Oct 2024	10	14.59	94.55	7.2	33.26	8.1	24.7	0.46
C5	21 Oct 2024	11	14.59	94.24	7.2	33.26	8.1	24.7	0.47
C5	30 Oct 2024	1	16.40	65.91	6.6	33.28	8.0	24.3	0.44
C5	30 Oct 2024	2	16.38	64.95	6.5	33.29	8.0	24.3	0.49
C5	30 Oct 2024	3	16.25	65.64	6.5	33.30	8.0	24.4	0.54
C5	30 Oct 2024	4	15.70	70.20	6.4	33.31	8.0	24.5	0.53
C5	30 Oct 2024	5	15.24	77.14	6.4	33.27	8.0	24.6	0.43
C5	30 Oct 2024	6	14.99	83.14	6.4	33.25	7.9	24.6	0.35
C5	30 Oct 2024	7	14.82	83.48	6.3	33.24	7.9	24.7	0.30
C5	30 Oct 2024	8	14.61	82.61	6.4	33.24	7.9	24.7	0.31
C5	30 Oct 2024	9	14.43	85.65	6.3	33.23	7.9	24.7	0.27
C5	30 Oct 2024	10	14.15	87.90	6.2	33.23	7.9	24.8	0.28
C5	30 Oct 2024	11	14.14	75.28	6.1	33.22	7.9	24.8	0.31
A6	08 Oct 2024	1	16.30	90.45	8.6	33.21	8.1	24.3	1.83
A6	08 Oct 2024	2	16.24	89.93	8.6	33.22	8.1	24.3	1.78
A6	08 Oct 2024	3	15.92	90.57	8.7	33.23	8.1	24.4	1.92
A6	08 Oct 2024	4	15.46	91.00	8.6	33.24	8.1	24.5	2.04
A6	08 Oct 2024	5	14.89	91.50	8.2	33.23	8.1	24.6	2.51
A6	08 Oct 2024	6	14.08	91.82	7.7	33.21	8.1	24.8	2.82
A6	08 Oct 2024	7	13.86	93.84	7.5	33.23	8.0	24.8	2.58
A6	08 Oct 2024	8	13.34	94.63	7.3	33.20	8.0	24.9	2.11
A6	08 Oct 2024	9	13.22	96.05	7.2	33.21	8.0	25.0	1.62
A6	08 Oct 2024	10	13.20	96.36	7.1	33.20	8.0	25.0	1.35
A6	08 Oct 2024	11	13.15	96.62	7.0	33.21	8.0	25.0	1.16
A6	08 Oct 2024	12	13.16	96.75	7.0	33.21	8.0	25.0	1.09
A6	08 Oct 2024	13	13.10	96.84	7.0	33.22	8.0	25.0	1.16
A6	08 Oct 2024	14	13.08	97.04	7.0	33.22	8.0	25.0	1.02
A6	08 Oct 2024	15	12.97	97.11	6.8	33.23	8.0	25.0	0.85
A6	08 Oct 2024	16	12.89	97.17	6.7	33.24	8.0	25.1	0.73
A6	08 Oct 2024	17	12.71	97.20	6.6	33.25	8.0	25.1	0.60
A6	08 Oct 2024	18	12.55	97.19	6.5	33.27	7.9	25.1	0.60
A6	08 Oct 2024	19	12.52	97.10	6.5	33.26	7.9	25.1	0.48
A6	15 Oct 2024	1	17.94	88.36	8.4	33.28	8.2	24.0	1.65
A6	15 Oct 2024	2	18.02	88.25	8.4	33.29	8.2	24.0	1.56
A6	15 Oct 2024	3	17.91	88.50	8.2	33.30	8.2	24.0	1.59
A6	15 Oct 2024	4	16.94	88.90	8.1	33.29	8.2	24.2	1.65
A6	15 Oct 2024	5	15.80	88.56	8.3	33.26	8.2	24.5	1.78
A6	15 Oct 2024	6	15.43	89.35	8.4	33.23	8.2	24.5	1.90
A6	15 Oct 2024	7	15.23	91.23	8.3	33.22	8.2	24.6	1.98
A6	15 Oct 2024	8	14.91	91.28	8.0	33.23	8.2	24.6	2.00
A6	15 Oct 2024	9	14.72	89.93	7.8	33.22	8.2	24.7	1.81
A6	15 Oct 2024	10	14.40	88.91	7.4	33.23	8.2	24.7	1.46
A6	15 Oct 2024	11	13.54	89.06	7.2	33.25	8.1	24.9	1.18
A6	15 Oct 2024	12	13.30	91.24	7.0	33.24	8.1	25.0	0.98
A6	15 Oct 2024	13	13.10	93.12	6.9	33.24	8.1	25.0	0.89
A6	15 Oct 2024	14	13.00	93.97	6.8	33.24	8.1	25.0	0.83
A6	15 Oct 2024	15	12.95	94.18	6.7	33.24	8.1	25.0	0.84
A6	15 Oct 2024	16	12.86	94.52	6.6	33.25	8.1	25.1	0.76
A6	15 Oct 2024	17	12.71	94.46	6.5	33.27	8.1	25.1	0.69
A6	15 Oct 2024	18	12.59	94.67	6.4	33.27	8.0	25.1	0.64
A6	15 Oct 2024	19	12.32	94.71	6.3	33.29	8.0	25.2	0.56
A6	15 Oct 2024	20	12.14	94.85	6.2	33.30	8.0	25.2	0.49

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
A6	21 Oct 2024	1	16.77	83.77	8.5	33.31	8.2	24.3	3.35
A6	21 Oct 2024	2	16.77	83.80	8.5	33.31	8.2	24.3	3.56
A6	21 Oct 2024	3	16.75	83.64	8.5	33.31	8.2	24.3	4.13
A6	21 Oct 2024	4	16.72	83.63	8.4	33.31	8.2	24.3	4.38
A6	21 Oct 2024	5	16.62	83.86	8.4	33.31	8.2	24.3	4.26
A6	21 Oct 2024	6	16.39	84.70	8.4	33.30	8.2	24.4	3.81
A6	21 Oct 2024	7	16.07	86.46	8.4	33.29	8.2	24.4	3.16
A6	21 Oct 2024	8	15.87	88.45	8.3	33.28	8.2	24.5	2.83
A6	21 Oct 2024	9	15.80	89.92	8.3	33.27	8.2	24.5	2.63
A6	21 Oct 2024	10	15.70	90.26	8.3	33.27	8.2	24.5	2.41
A6	21 Oct 2024	11	15.65	90.77	8.3	33.26	8.2	24.5	2.35
A6	21 Oct 2024	12	15.66	90.72	8.3	33.26	8.2	24.5	2.45
A6	21 Oct 2024	13	15.65	90.73	8.3	33.26	8.2	24.5	2.50
A6	21 Oct 2024	14	15.56	90.89	8.2	33.27	8.2	24.5	2.30
A6	21 Oct 2024	15	15.48	90.94	8.1	33.26	8.2	24.5	2.23
A6	21 Oct 2024	16	14.99	90.99	7.8	33.28	8.2	24.6	1.96
A6	21 Oct 2024	17	14.44	91.87	7.5	33.27	8.2	24.8	1.52
A6	21 Oct 2024	18	13.91	92.92	7.3	33.24	8.1	24.8	1.09
A6	21 Oct 2024	19	13.94	94.49	7.2	33.24	8.1	24.8	0.94
A6	21 Oct 2024	20	13.81	94.98	7.1	33.24	8.1	24.9	0.73
A6	30 Oct 2024	1	17.09	75.71	7.5	33.31	8.1	24.2	1.97
A6	30 Oct 2024	2	17.08	75.57	7.5	33.31	8.1	24.2	2.12
A6	30 Oct 2024	3	17.07	75.13	7.5	33.31	8.1	24.2	2.72
A6	30 Oct 2024	4	17.05	74.96	7.5	33.31	8.1	24.2	2.84
A6	30 Oct 2024	5	17.02	74.53	7.4	33.31	8.1	24.2	2.89
A6	30 Oct 2024	6	17.02	74.62	7.4	33.31	8.0	24.2	2.82
A6	30 Oct 2024	7	16.99	74.91	7.4	33.31	8.0	24.2	2.62
A6	30 Oct 2024	8	16.98	74.94	7.3	33.31	8.0	24.2	2.42
A6	30 Oct 2024	9	16.93	74.96	7.1	33.31	8.0	24.2	2.13
A6	30 Oct 2024	10	16.43	75.41	7.1	33.31	8.0	24.3	1.65
A6	30 Oct 2024	11	16.04	79.55	7.1	33.26	8.0	24.4	1.07
A6	30 Oct 2024	12	16.03	78.09	7.0	33.28	8.0	24.4	0.95
A6	30 Oct 2024	13	15.25	81.47	7.0	33.26	8.0	24.6	0.74
A6	30 Oct 2024	14	15.12	87.86	6.9	33.24	8.0	24.6	0.64
A6	30 Oct 2024	15	14.72	90.30	6.7	33.25	8.0	24.7	0.53
A6	30 Oct 2024	16	13.58	91.20	6.5	33.26	7.9	24.9	0.41
A6	30 Oct 2024	17	13.37	91.55	6.3	33.23	7.9	24.9	0.31
A6	30 Oct 2024	18	13.32	91.58	6.3	33.23	7.9	25.0	0.26
C6	08 Oct 2024	1	16.26	88.01	8.4	33.22	8.1	24.3	1.57
C6	08 Oct 2024	2	16.18	89.61	8.4	33.22	8.1	24.3	1.70
C6	08 Oct 2024	3	15.59	89.61	8.5	33.23	8.1	24.5	2.26
C6	08 Oct 2024	4	15.19	88.78	8.3	33.22	8.1	24.6	2.93
C6	08 Oct 2024	5	14.78	90.70	7.8	33.21	8.1	24.6	1.69
C6	08 Oct 2024	6	14.54	94.53	7.5	33.20	8.1	24.7	0.82
C6	08 Oct 2024	7	14.47	95.55	7.5	33.20	8.1	24.7	0.67
C6	08 Oct 2024	8	14.39	95.78	7.5	33.20	8.0	24.7	0.65
C6	08 Oct 2024	9	14.34	96.05	7.3	33.20	8.0	24.7	0.52
C6	08 Oct 2024	10	14.34	95.80	7.2	33.19	8.0	24.7	0.42
C6	15 Oct 2024	1	17.67	86.74	8.1	33.29	8.2	24.0	1.30
C6	15 Oct 2024	2	17.67	86.73	8.1	33.29	8.2	24.0	1.39
C6	15 Oct 2024	3	17.47	86.92	7.9	33.29	8.2	24.1	1.47
C6	15 Oct 2024	4	17.11	86.35	7.6	33.29	8.2	24.2	1.42
C6	15 Oct 2024	5	16.24	82.93	7.5	33.29	8.2	24.4	1.16
C6	15 Oct 2024	6	15.36	78.29	7.3	33.27	8.2	24.6	1.03
C6	15 Oct 2024	7	14.67	78.84	7.1	33.27	8.1	24.7	0.83
C6	15 Oct 2024	8	14.20	82.80	7.0	33.25	8.1	24.8	0.67
C6	15 Oct 2024	9	13.98	86.80	6.8	33.25	8.1	24.8	0.64

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
C6	15 Oct 2024	10	13.68	88.54	6.5	33.24	8.1	24.9	0.61
C6	15 Oct 2024	11	13.60	85.93	6.2	33.24	8.1	24.9	0.52
C6	21 Oct 2024	1	16.62	87.71	8.2	33.31	8.2	24.3	1.04
C6	21 Oct 2024	2	16.40	87.37	8.2	33.31	8.2	24.4	1.27
C6	21 Oct 2024	3	15.98	86.75	8.2	33.29	8.2	24.4	1.50
C6	21 Oct 2024	4	15.62	90.84	8.1	33.28	8.2	24.5	1.50
C6	21 Oct 2024	5	15.41	92.22	7.9	33.27	8.2	24.5	1.42
C6	21 Oct 2024	6	15.28	93.27	7.7	33.27	8.2	24.6	1.24
C6	21 Oct 2024	7	15.10	94.37	7.5	33.27	8.2	24.6	0.92
C6	21 Oct 2024	8	14.88	95.37	7.3	33.26	8.1	24.7	0.57
C6	21 Oct 2024	9	14.75	96.01	7.2	33.26	8.1	24.7	0.42
C6	21 Oct 2024	10	14.73	95.71	7.3	33.25	8.1	24.7	0.39
C6	30 Oct 2024	1	16.54	70.76	6.6	33.29	8.0	24.3	0.44
C6	30 Oct 2024	2	16.51	69.70	6.6	33.30	8.0	24.3	0.47
C6	30 Oct 2024	3	16.44	69.42	6.7	33.29	8.0	24.3	0.64
C6	30 Oct 2024	4	16.40	69.27	6.7	33.29	8.0	24.3	0.93
C6	30 Oct 2024	5	16.34	70.13	6.6	33.29	8.0	24.4	1.03
C6	30 Oct 2024	6	15.94	70.99	6.6	33.30	8.0	24.5	0.97
C6	30 Oct 2024	7	15.61	75.09	6.4	33.28	8.0	24.5	0.72
C6	30 Oct 2024	8	14.59	76.18	6.2	33.30	7.9	24.7	0.54
C6	30 Oct 2024	9	14.32	71.71	6.0	33.23	7.9	24.8	0.48
C7	08 Oct 2024	1	16.32	89.16	8.6	33.21	8.1	24.3	2.33
C7	08 Oct 2024	2	16.25	89.00	8.6	33.21	8.1	24.3	2.47
C7	08 Oct 2024	3	16.02	89.09	8.6	33.22	8.1	24.4	2.85
C7	08 Oct 2024	4	15.67	88.76	8.6	33.21	8.1	24.4	3.39
C7	08 Oct 2024	5	15.55	88.72	8.6	33.20	8.1	24.5	3.70
C7	08 Oct 2024	6	15.47	88.47	8.5	33.20	8.1	24.5	5.06
C7	08 Oct 2024	7	15.36	86.87	8.4	33.20	8.1	24.5	8.30
C7	08 Oct 2024	8	15.20	81.55	8.1	33.21	8.1	24.5	9.85
C7	08 Oct 2024	9	15.05	82.87	7.9	33.20	8.1	24.6	6.43
C7	08 Oct 2024	10	14.83	88.92	7.8	33.21	8.1	24.6	3.84
C7	08 Oct 2024	11	14.72	91.56	7.8	33.20	8.1	24.6	2.68
C7	08 Oct 2024	12	14.70	92.97	7.8	33.20	8.1	24.6	2.23
C7	08 Oct 2024	13	14.53	93.25	7.6	33.20	8.1	24.7	1.75
C7	08 Oct 2024	14	13.94	94.39	7.4	33.22	8.0	24.8	1.20
C7	08 Oct 2024	15	13.73	95.23	7.2	33.19	8.0	24.8	1.01
C7	08 Oct 2024	16	13.42	95.78	7.2	33.21	8.0	24.9	0.95
C7	08 Oct 2024	17	13.37	95.39	7.1	33.20	8.0	24.9	0.86
C7	08 Oct 2024	18	13.31	96.45	7.0	33.21	8.0	24.9	0.77
C7	15 Oct 2024	1	18.23	93.36	8.6	33.31	8.3	23.9	1.12
C7	15 Oct 2024	2	18.20	93.42	8.5	33.30	8.3	23.9	1.23
C7	15 Oct 2024	3	18.00	93.13	8.5	33.30	8.3	24.0	1.43
C7	15 Oct 2024	4	17.39	92.49	8.5	33.29	8.3	24.1	1.39
C7	15 Oct 2024	5	16.93	92.43	8.6	33.27	8.2	24.2	1.40
C7	15 Oct 2024	6	16.73	92.04	8.6	33.25	8.2	24.2	1.46
C7	15 Oct 2024	7	16.47	91.09	8.4	33.25	8.2	24.3	1.63
C7	15 Oct 2024	8	15.84	90.77	8.4	33.24	8.2	24.4	1.85
C7	15 Oct 2024	9	15.18	90.83	8.3	33.25	8.2	24.6	2.33
C7	15 Oct 2024	10	14.82	90.57	8.1	33.23	8.2	24.6	2.42
C7	15 Oct 2024	11	14.17	91.14	7.9	33.24	8.2	24.8	2.03
C7	15 Oct 2024	12	13.85	92.73	7.6	33.23	8.2	24.8	1.72
C7	15 Oct 2024	13	13.54	93.04	7.2	33.23	8.1	24.9	1.50
C7	15 Oct 2024	14	13.11	93.33	6.9	33.24	8.1	25.0	1.25
C7	15 Oct 2024	15	12.86	93.35	6.7	33.25	8.1	25.1	0.94
C7	15 Oct 2024	16	12.79	93.29	6.6	33.25	8.1	25.1	0.79
C7	15 Oct 2024	17	12.74	93.46	6.5	33.25	8.1	25.1	0.72
C7	15 Oct 2024	18	12.55	93.56	6.4	33.27	8.1	25.1	0.61

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
C7	15 Oct 2024	19	12.40	93.73	6.3	33.28	8.1	25.2	0.52
C7	21 Oct 2024	1	16.66	86.51	8.4	33.30	8.2	24.3	2.38
C7	21 Oct 2024	2	16.62	86.55	8.4	33.30	8.2	24.3	2.48
C7	21 Oct 2024	3	16.64	86.89	8.3	33.29	8.2	24.3	2.77
C7	21 Oct 2024	4	16.39	86.69	8.3	33.30	8.2	24.4	2.96
C7	21 Oct 2024	5	16.29	87.41	8.2	33.28	8.2	24.4	3.01
C7	21 Oct 2024	6	16.05	87.66	8.2	33.29	8.2	24.4	2.86
C7	21 Oct 2024	7	15.93	88.91	8.1	33.28	8.2	24.4	2.73
C7	21 Oct 2024	8	15.87	90.05	8.1	33.27	8.2	24.4	2.53
C7	21 Oct 2024	9	15.76	90.31	8.1	33.27	8.2	24.5	2.43
C7	21 Oct 2024	10	15.63	90.50	8.1	33.27	8.2	24.5	2.35
C7	21 Oct 2024	11	15.52	90.73	8.0	33.26	8.2	24.5	2.22
C7	21 Oct 2024	12	15.41	90.98	8.0	33.27	8.2	24.5	2.19
C7	21 Oct 2024	13	15.25	91.19	7.9	33.26	8.2	24.6	2.08
C7	21 Oct 2024	14	14.88	91.05	7.7	33.25	8.2	24.6	2.35
C7	21 Oct 2024	15	14.57	90.38	7.7	33.24	8.2	24.7	2.16
C7	21 Oct 2024	16	14.26	91.11	7.5	33.23	8.1	24.8	1.65
C7	21 Oct 2024	17	13.80	93.67	7.2	33.24	8.1	24.9	1.21
C7	21 Oct 2024	18	13.42	95.19	7.0	33.24	8.1	24.9	0.73
C7	30 Oct 2024	1	17.68	83.32	7.9	33.35	8.1	24.1	1.07
C7	30 Oct 2024	2	17.62	83.29	7.8	33.35	8.1	24.1	1.47
C7	30 Oct 2024	3	17.59	81.86	7.7	33.33	8.1	24.1	1.92
C7	30 Oct 2024	4	16.95	81.05	7.5	33.34	8.1	24.3	1.77
C7	30 Oct 2024	5	16.28	81.57	7.5	33.27	8.1	24.4	1.43
C7	30 Oct 2024	6	16.23	83.96	7.4	33.26	8.0	24.4	1.26
C7	30 Oct 2024	7	16.24	84.81	7.3	33.26	8.0	24.4	1.17
C7	30 Oct 2024	8	16.14	84.90	7.3	33.26	8.0	24.4	1.07
C7	30 Oct 2024	9	15.89	85.94	7.3	33.25	8.0	24.4	1.02
C7	30 Oct 2024	10	15.63	86.89	7.2	33.24	8.0	24.5	0.98
C7	30 Oct 2024	11	15.40	88.02	7.1	33.24	8.0	24.5	0.92
C7	30 Oct 2024	12	14.94	88.77	7.0	33.24	8.0	24.6	0.77
C7	30 Oct 2024	13	14.69	89.13	6.8	33.22	8.0	24.7	0.66
C7	30 Oct 2024	14	14.58	89.59	6.8	33.22	8.0	24.7	0.57
C7	30 Oct 2024	15	14.42	90.13	6.7	33.22	8.0	24.7	0.48
C7	30 Oct 2024	16	14.38	90.71	6.7	33.22	8.0	24.7	0.43
C7	30 Oct 2024	17	14.06	91.15	6.6	33.23	7.9	24.8	0.35
C7	30 Oct 2024	18	13.85	91.32	6.4	33.22	7.9	24.8	0.35
C8	08 Oct 2024	1	15.94	88.88	8.5	33.21	8.1	24.4	2.39
C8	08 Oct 2024	2	15.94	88.89	8.5	33.21	8.1	24.4	2.45
C8	08 Oct 2024	3	15.75	88.50	8.5	33.22	8.1	24.4	2.82
C8	08 Oct 2024	4	15.68	88.63	8.5	33.21	8.1	24.4	3.39
C8	08 Oct 2024	5	15.41	88.60	8.2	33.24	8.1	24.5	3.99
C8	08 Oct 2024	6	14.81	88.24	8.0	33.23	8.1	24.6	4.21
C8	08 Oct 2024	7	14.58	89.78	7.8	33.21	8.1	24.7	3.70
C8	08 Oct 2024	8	14.38	92.37	7.8	33.20	8.1	24.7	2.65
C8	08 Oct 2024	9	14.33	93.48	7.7	33.20	8.1	24.7	1.99
C8	08 Oct 2024	10	14.21	94.18	7.7	33.20	8.1	24.8	1.80
C8	08 Oct 2024	11	14.16	94.56	7.6	33.20	8.1	24.8	1.45
C8	08 Oct 2024	12	14.00	95.06	7.5	33.21	8.0	24.8	1.15
C8	08 Oct 2024	13	13.94	95.69	7.4	33.20	8.0	24.8	0.99
C8	08 Oct 2024	14	13.87	95.78	7.3	33.21	8.0	24.8	0.86
C8	08 Oct 2024	15	13.51	96.18	7.1	33.22	8.0	24.9	0.66
C8	08 Oct 2024	16	13.26	96.07	7.0	33.22	8.0	25.0	0.71
C8	08 Oct 2024	17	13.24	96.07	6.9	33.21	8.0	25.0	0.61
C8	08 Oct 2024	18	13.23	96.13	6.8	33.21	8.0	25.0	0.53
C8	08 Oct 2024	19	13.22	95.83	6.8	33.21	8.0	25.0	0.49
C8	08 Oct 2024	20	13.21	95.87	6.8	33.21	8.0	25.0	0.47

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
C8	15 Oct 2024	1	18.23	91.96	8.6	33.31	8.3	23.9	1.34
C8	15 Oct 2024	2	18.24	91.83	8.5	33.31	8.3	23.9	1.39
C8	15 Oct 2024	3	18.23	91.65	8.5	33.31	8.3	23.9	1.46
C8	15 Oct 2024	4	17.71	91.84	8.4	33.30	8.3	24.0	1.63
C8	15 Oct 2024	5	17.31	90.88	8.5	33.27	8.2	24.1	1.55
C8	15 Oct 2024	6	17.10	90.49	8.5	33.26	8.2	24.2	1.62
C8	15 Oct 2024	7	16.75	90.25	8.4	33.25	8.2	24.2	1.58
C8	15 Oct 2024	8	16.11	90.08	8.2	33.26	8.2	24.4	1.83
C8	15 Oct 2024	9	14.97	90.33	8.2	33.25	8.2	24.6	2.42
C8	15 Oct 2024	10	14.32	90.02	8.0	33.23	8.2	24.8	2.54
C8	15 Oct 2024	11	14.16	90.78	7.7	33.22	8.2	24.8	2.35
C8	15 Oct 2024	12	13.79	91.40	7.5	33.22	8.2	24.9	2.25
C8	15 Oct 2024	13	13.41	92.64	7.2	33.22	8.1	24.9	2.20
C8	15 Oct 2024	14	13.16	93.39	7.0	33.22	8.1	25.0	1.87
C8	15 Oct 2024	15	13.07	94.78	6.9	33.22	8.1	25.0	1.55
C8	15 Oct 2024	16	13.02	95.23	6.7	33.23	8.1	25.0	1.07
C8	15 Oct 2024	17	12.88	90.63	6.5	33.25	8.1	25.1	0.75
C8	15 Oct 2024	18	12.78	88.01	6.4	33.26	8.1	25.1	0.67
C8	15 Oct 2024	19	12.70	88.55	6.4	33.26	8.1	25.1	0.69
C8	15 Oct 2024	20	12.68	90.04	6.4	33.26	8.0	25.1	0.65
C8	21 Oct 2024	1	16.91	91.62	8.1	33.31	8.2	24.2	0.98
C8	21 Oct 2024	2	16.92	91.68	8.1	33.31	8.2	24.2	1.16
C8	21 Oct 2024	3	16.67	90.79	8.0	33.31	8.2	24.3	1.53
C8	21 Oct 2024	4	16.46	90.69	7.8	33.31	8.2	24.3	1.44
C8	21 Oct 2024	5	15.75	91.67	7.8	33.30	8.2	24.5	1.35
C8	21 Oct 2024	6	15.66	92.26	7.7	33.28	8.2	24.5	1.28
C8	21 Oct 2024	7	15.50	92.82	7.7	33.28	8.2	24.5	1.28
C8	21 Oct 2024	8	15.28	92.76	7.7	33.27	8.2	24.6	1.44
C8	21 Oct 2024	9	15.04	92.83	7.6	33.28	8.2	24.6	1.49
C8	21 Oct 2024	10	14.87	92.96	7.6	33.26	8.2	24.7	1.52
C8	21 Oct 2024	11	14.82	93.39	7.5	33.26	8.2	24.7	1.40
C8	21 Oct 2024	12	14.58	93.73	7.5	33.26	8.2	24.7	1.22
C8	21 Oct 2024	13	14.39	94.69	7.4	33.25	8.1	24.8	0.97
C8	21 Oct 2024	14	14.28	95.18	7.4	33.24	8.1	24.8	0.89
C8	21 Oct 2024	15	14.22	95.83	7.4	33.24	8.1	24.8	0.83
C8	21 Oct 2024	16	14.10	95.81	7.3	33.24	8.1	24.8	0.81
C8	21 Oct 2024	17	13.92	95.79	7.2	33.24	8.1	24.8	0.86
C8	21 Oct 2024	18	13.76	95.54	7.1	33.24	8.1	24.9	0.74
C8	21 Oct 2024	19	13.72	95.89	7.0	33.23	8.1	24.9	0.55
C8	21 Oct 2024	20	13.72	96.40	6.9	33.23	8.1	24.9	0.48
C8	30 Oct 2024	1	17.72	84.29	8.0	33.35	8.1	24.1	0.70
C8	30 Oct 2024	2	17.72	82.40	8.0	33.35	8.1	24.1	0.67
C8	30 Oct 2024	3	17.70	82.41	7.9	33.35	8.1	24.1	0.92
C8	30 Oct 2024	4	17.54	85.13	7.8	33.35	8.1	24.1	1.92
C8	30 Oct 2024	5	17.26	81.21	7.6	33.33	8.1	24.2	2.16
C8	30 Oct 2024	6	16.74	78.30	7.5	33.31	8.1	24.3	1.68
C8	30 Oct 2024	7	16.35	79.46	7.6	33.27	8.1	24.3	1.28
C8	30 Oct 2024	8	16.13	83.98	7.8	33.24	8.1	24.4	1.20
C8	30 Oct 2024	9	15.89	89.32	7.9	33.22	8.1	24.4	1.23
C8	30 Oct 2024	10	15.94	93.18	7.8	33.22	8.1	24.4	1.34
C8	30 Oct 2024	11	15.70	93.10	7.7	33.22	8.0	24.4	1.39
C8	30 Oct 2024	12	15.43	93.10	7.6	33.22	8.0	24.5	1.35
C8	30 Oct 2024	13	15.39	93.27	7.5	33.22	8.0	24.5	1.29
C8	30 Oct 2024	14	15.34	93.85	7.4	33.22	8.0	24.5	1.18
C8	30 Oct 2024	15	15.24	93.79	7.3	33.22	8.0	24.5	1.07
C8	30 Oct 2024	16	14.79	92.90	7.1	33.24	8.0	24.7	0.84
C8	30 Oct 2024	17	14.45	90.84	6.8	33.23	8.0	24.7	0.63
C8	30 Oct 2024	18	14.16	88.83	6.5	33.23	7.9	24.8	0.50
C8	30 Oct 2024	19	13.96	84.63	6.3	33.23	7.9	24.8	0.42

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
C8	30 Oct 2024	20	13.87	79.98	6.2	33.22	7.9	24.8	0.45

NA = not available

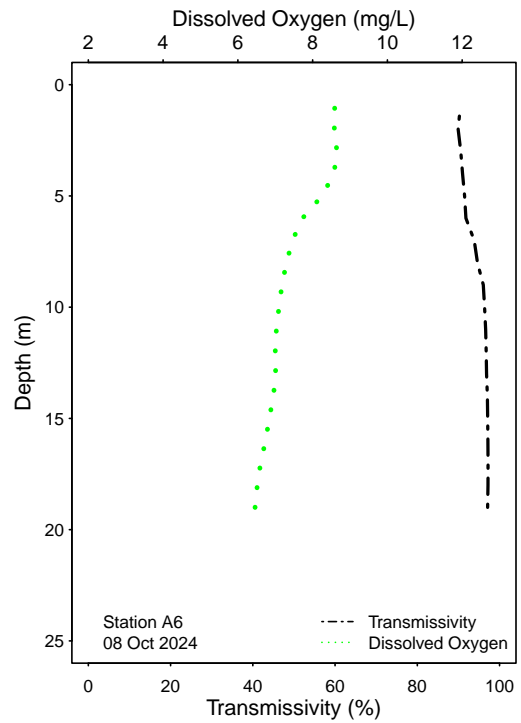
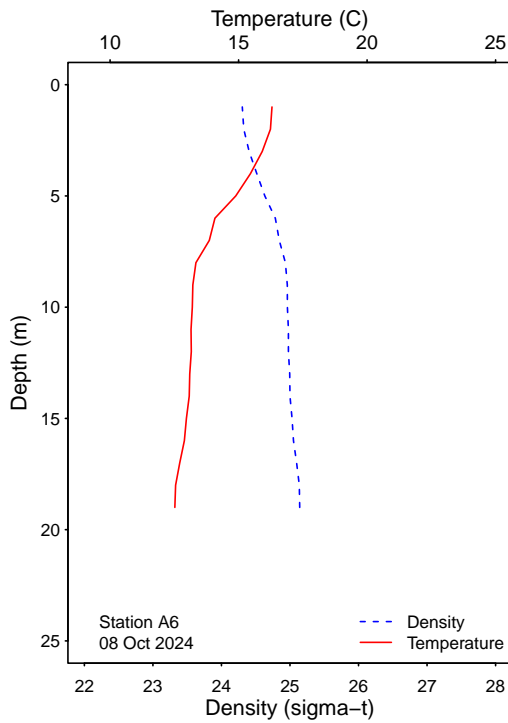
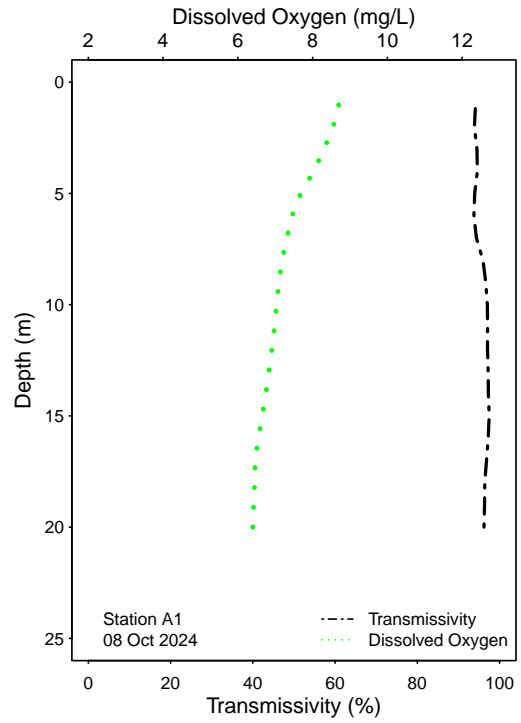
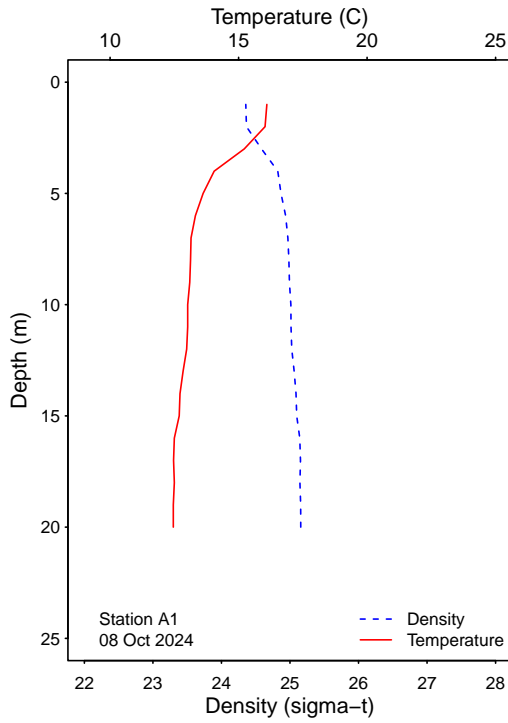


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

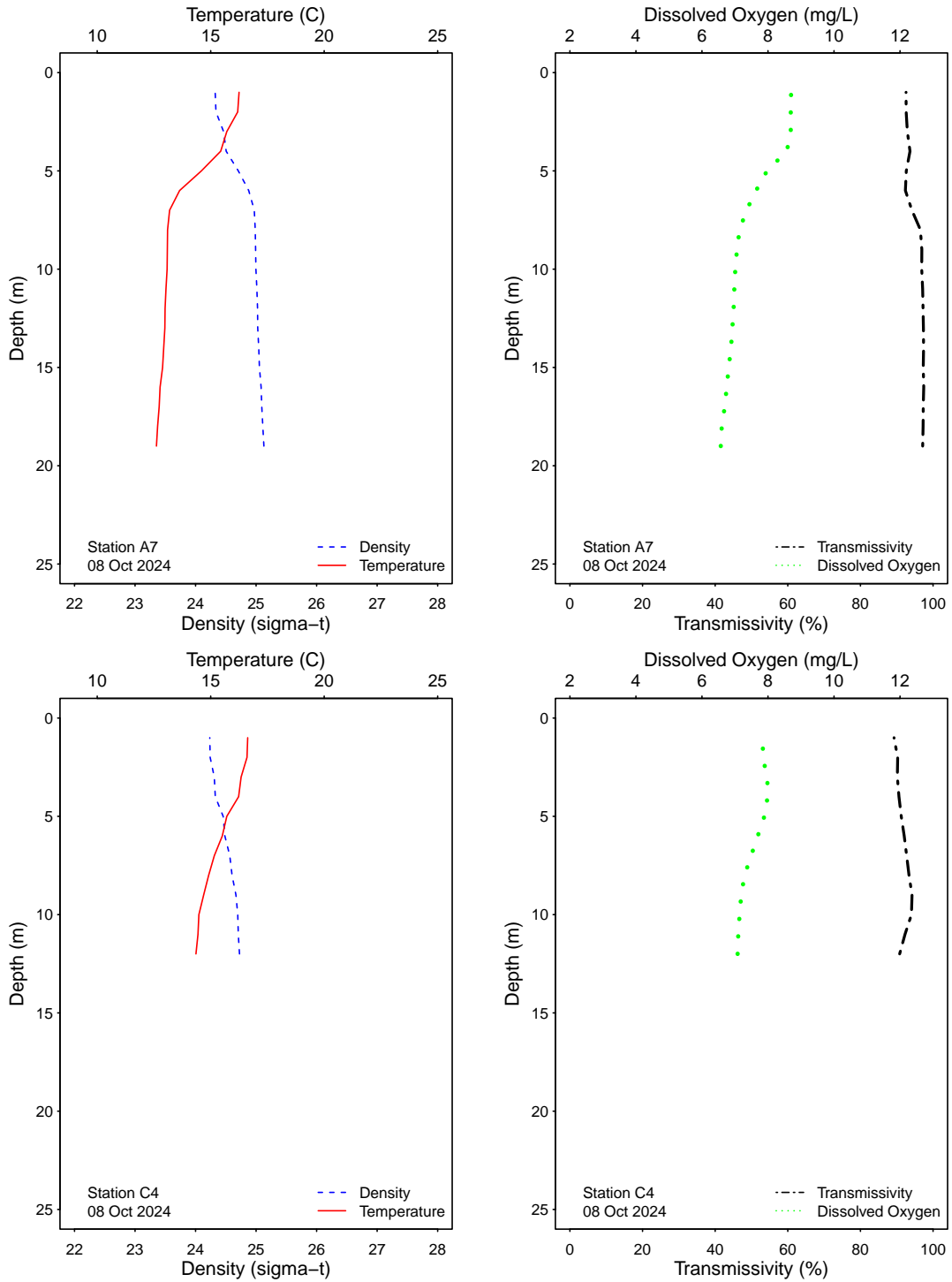


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

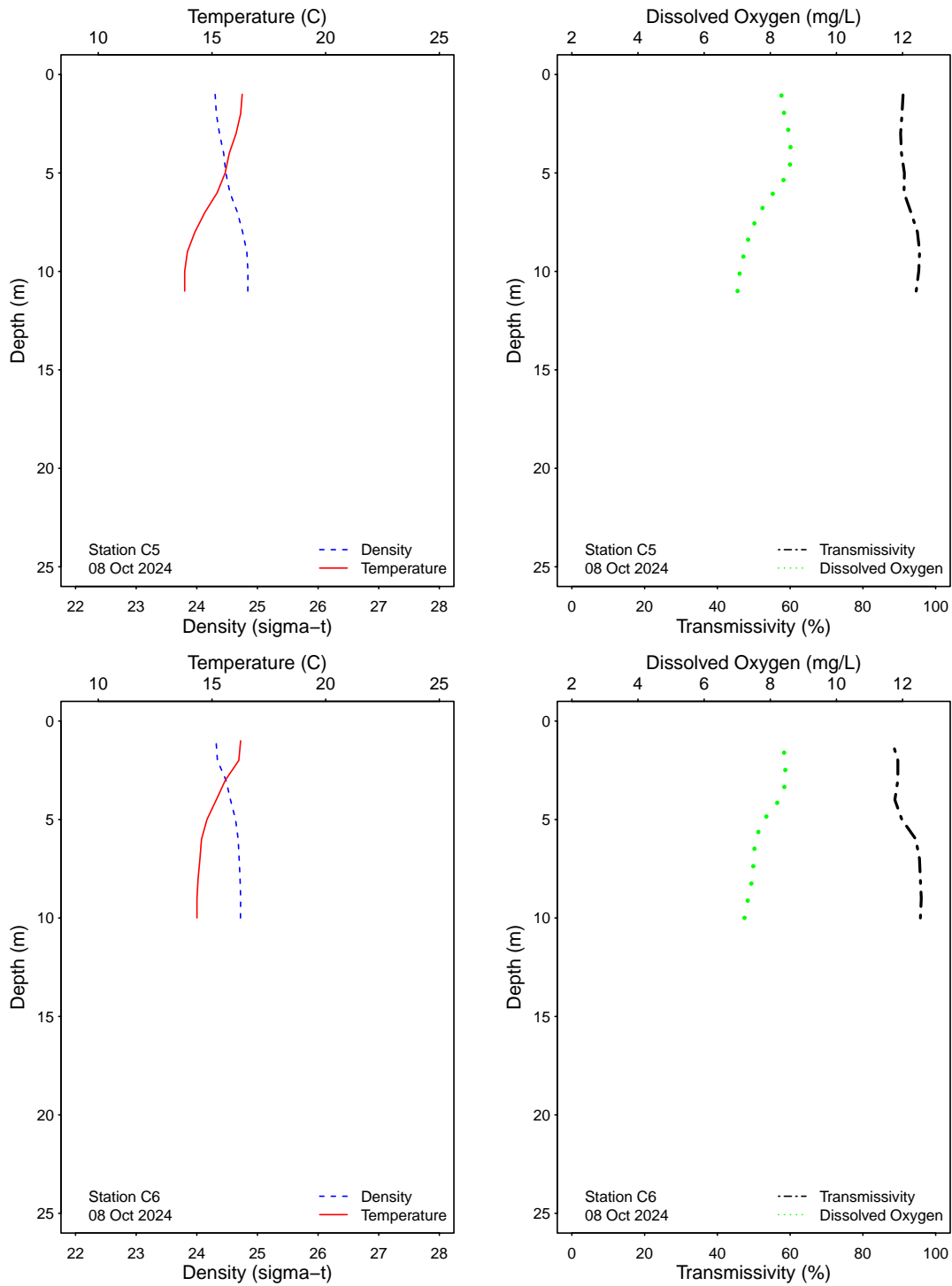


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

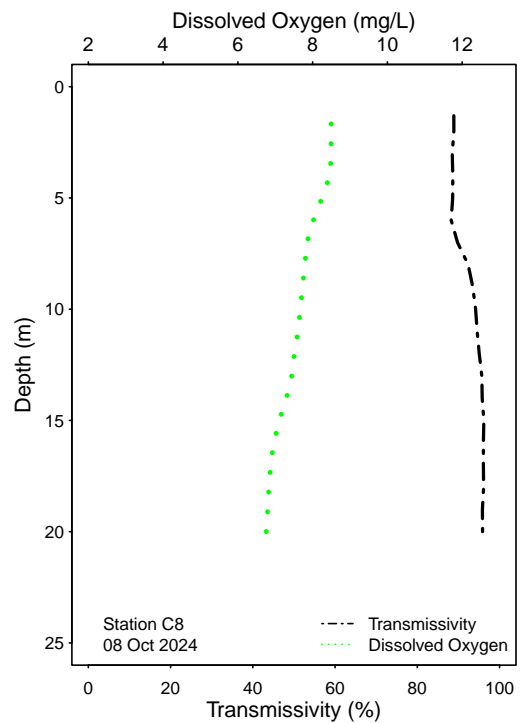
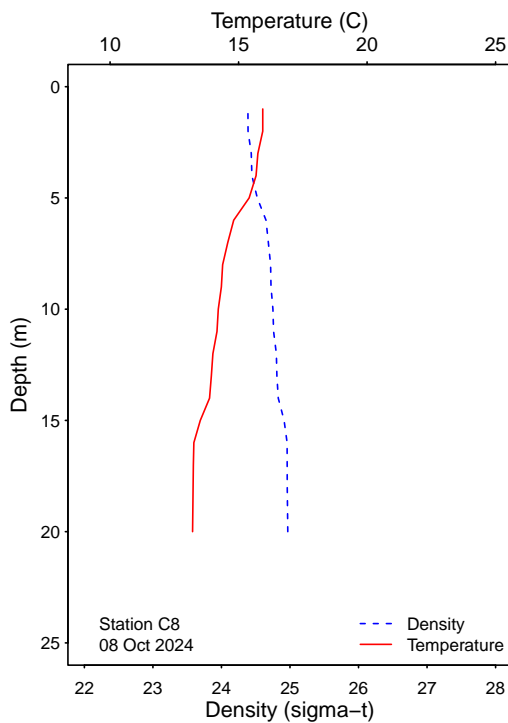
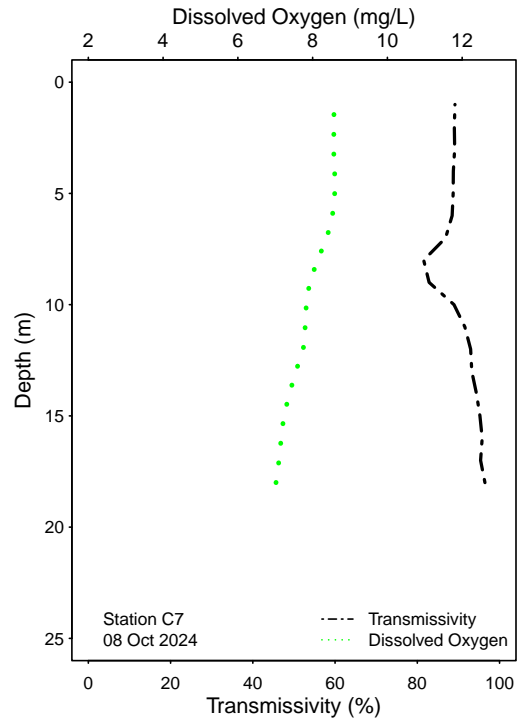
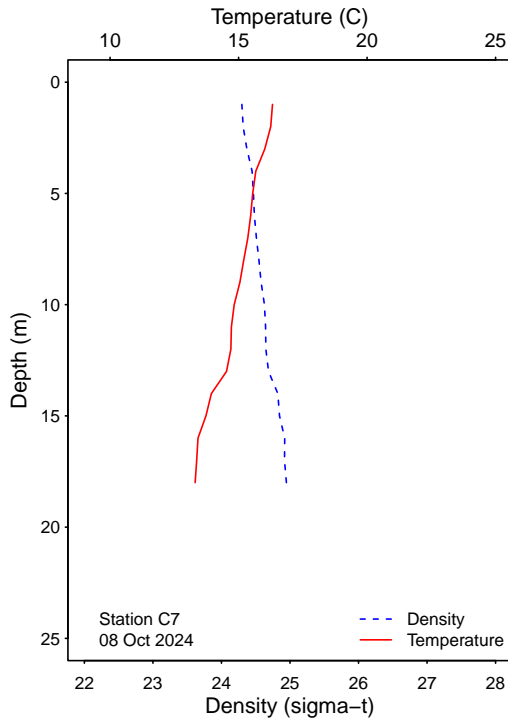


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

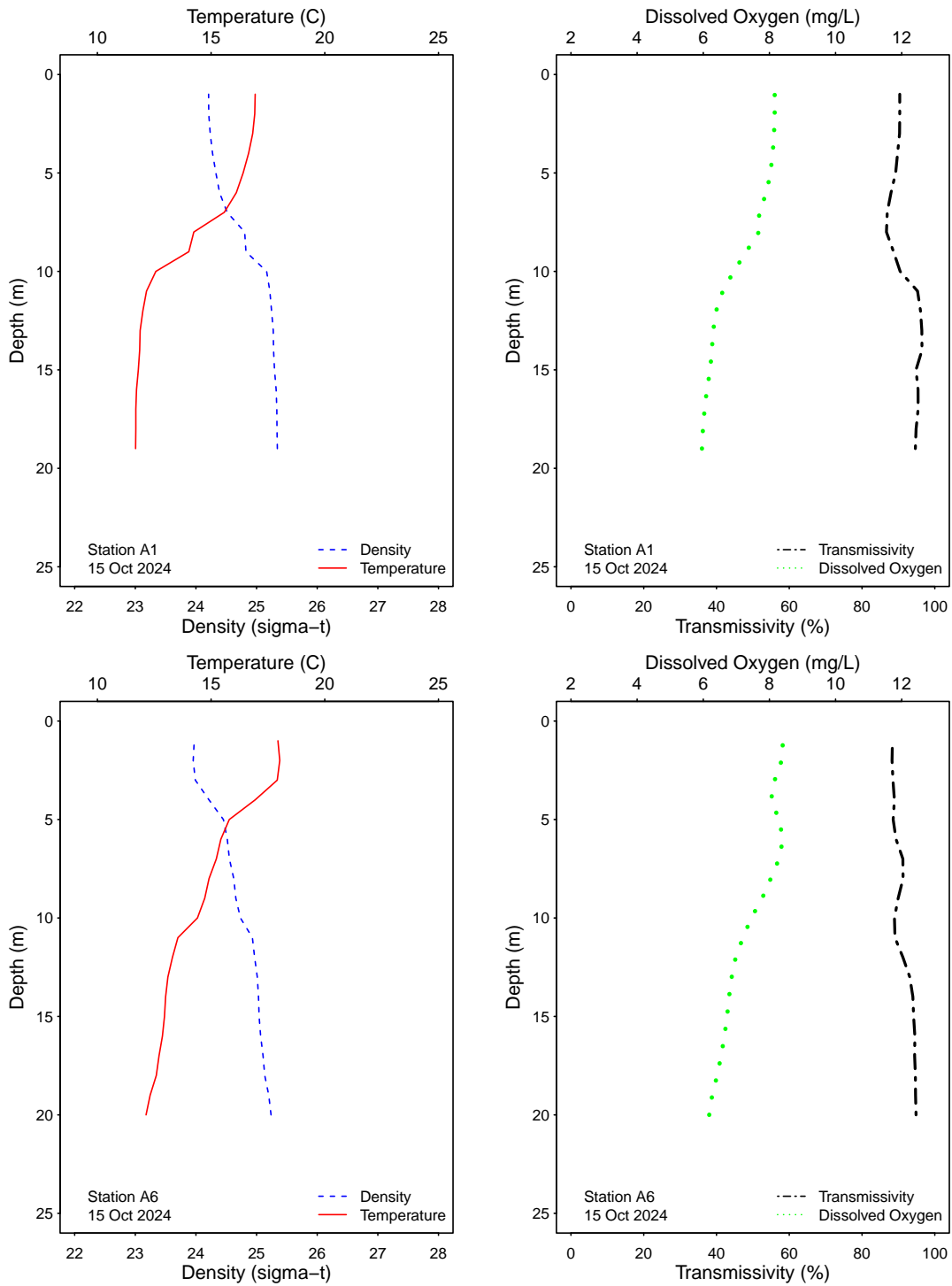


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

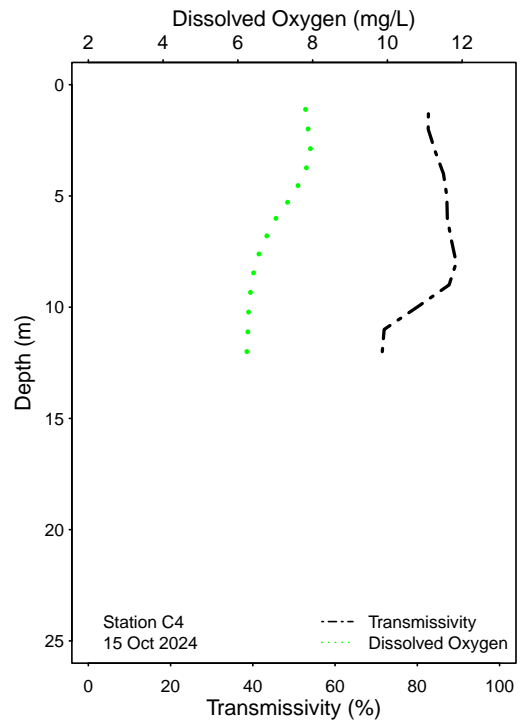
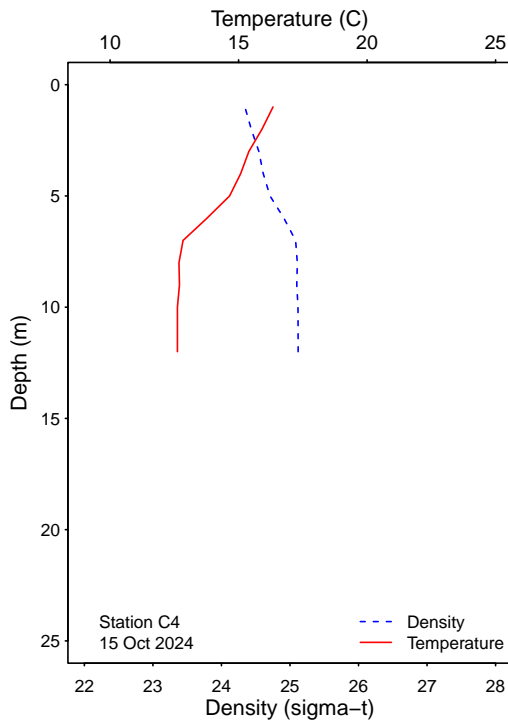
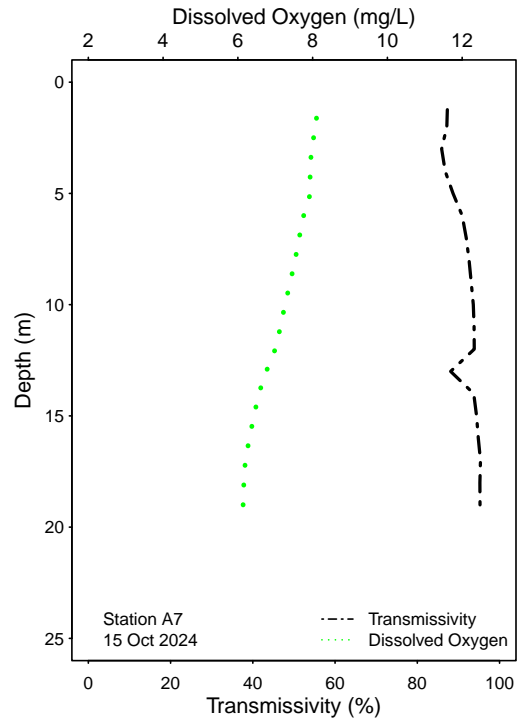
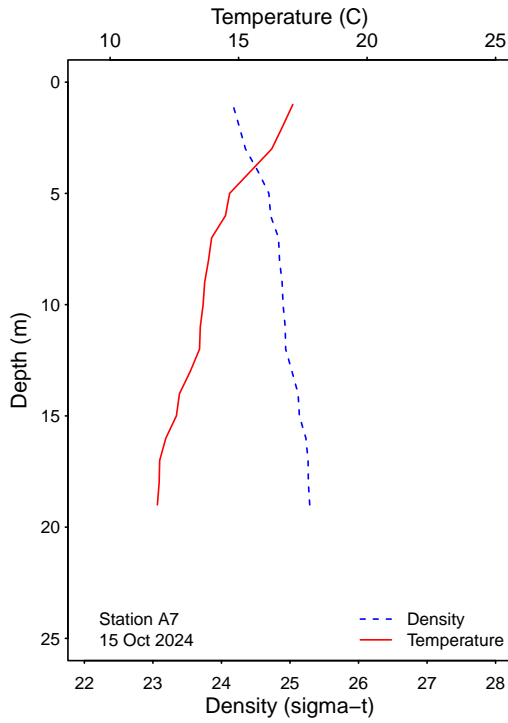


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

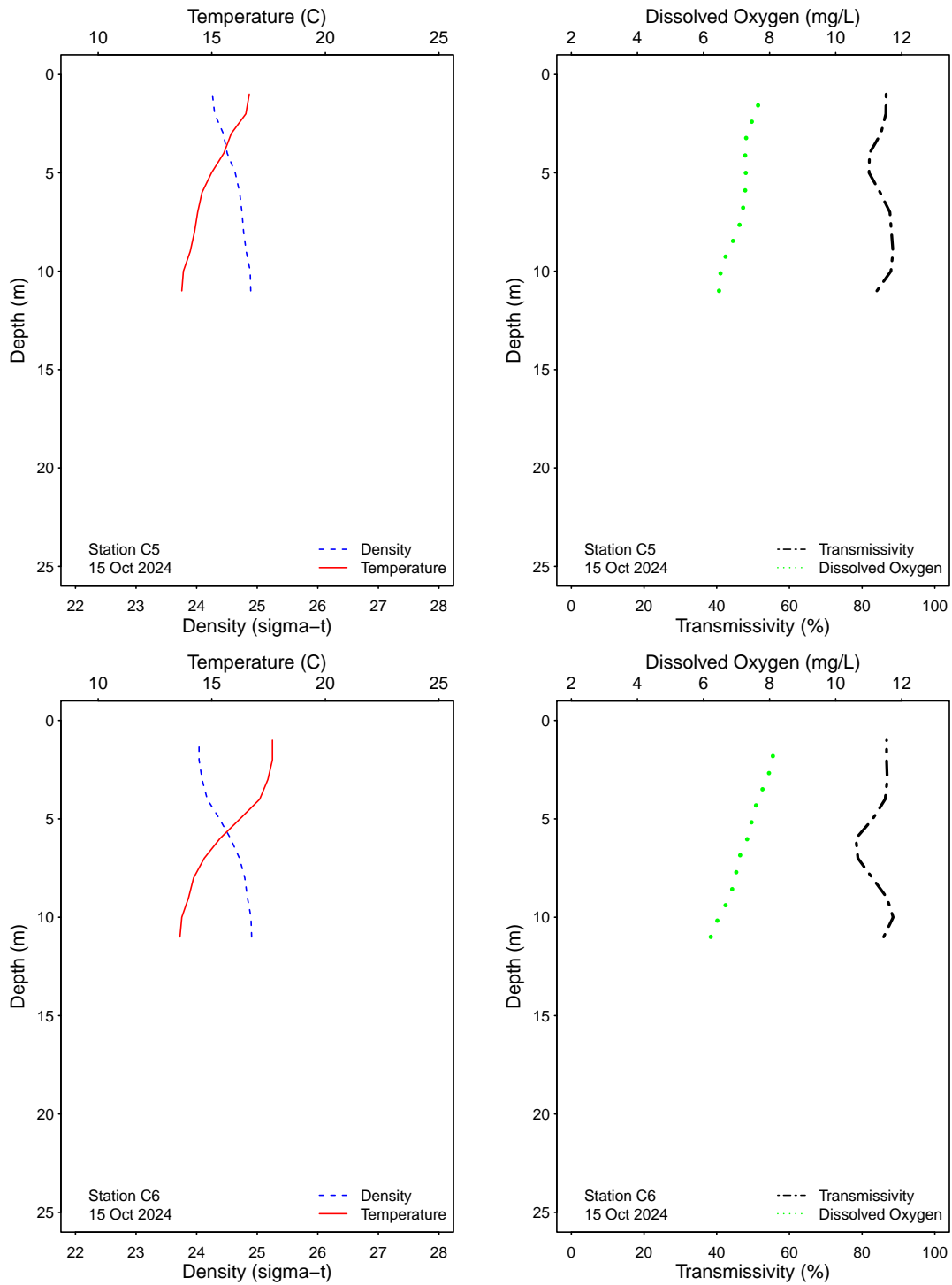


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

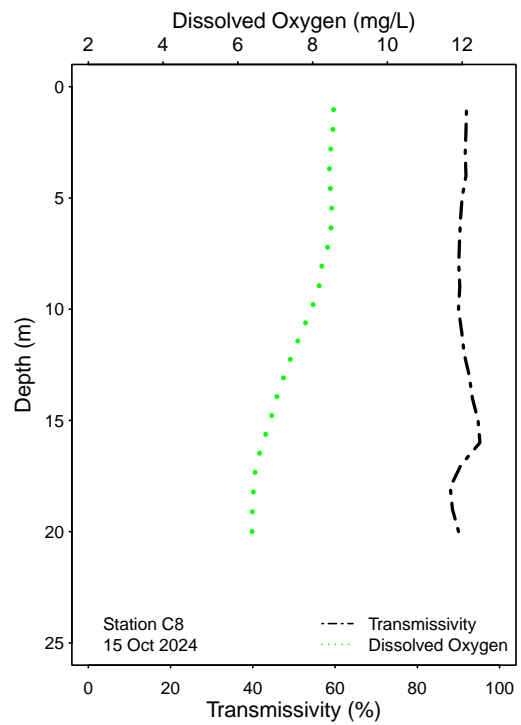
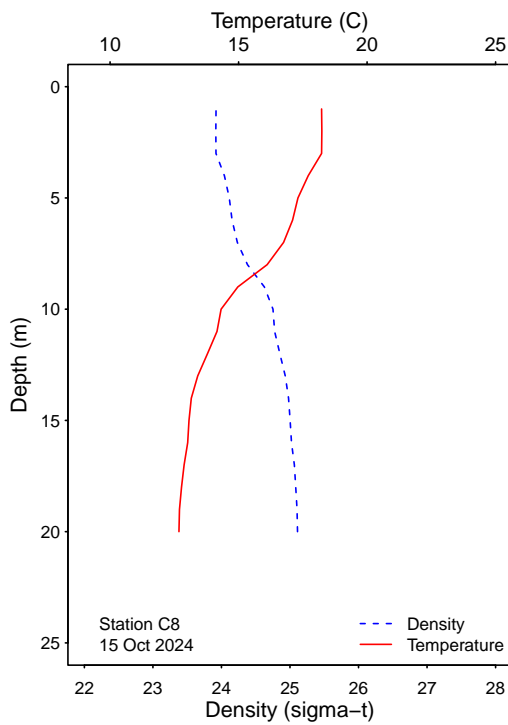
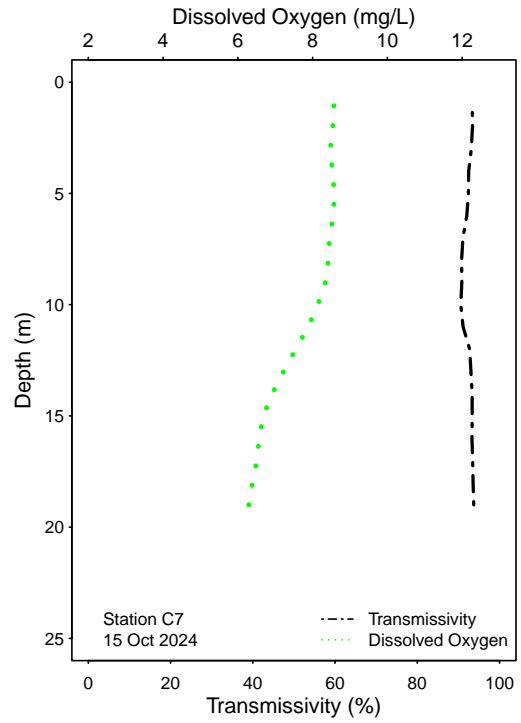
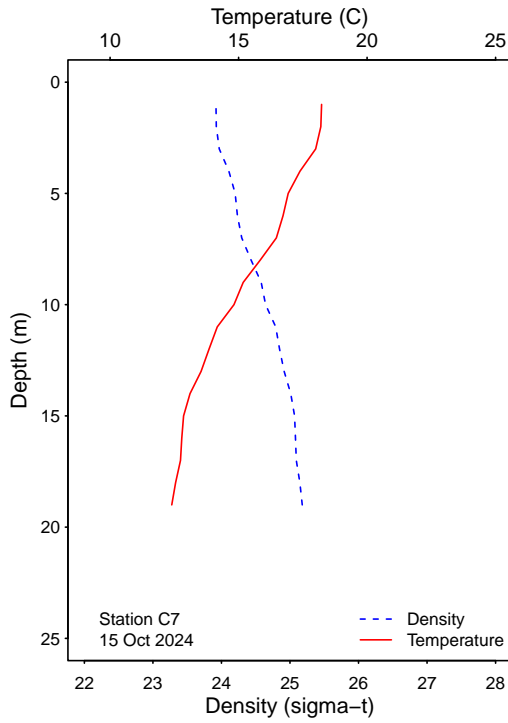


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

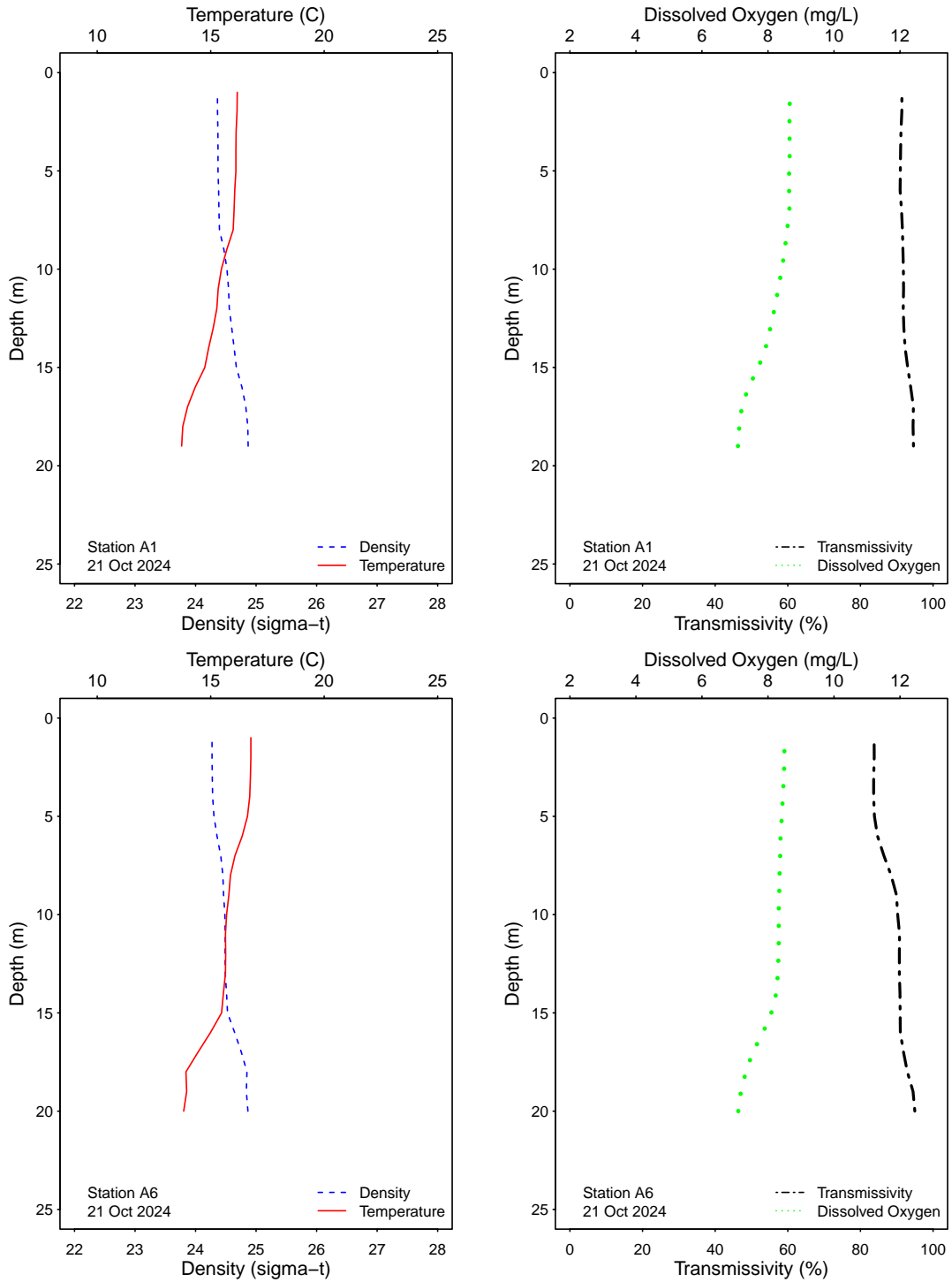


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

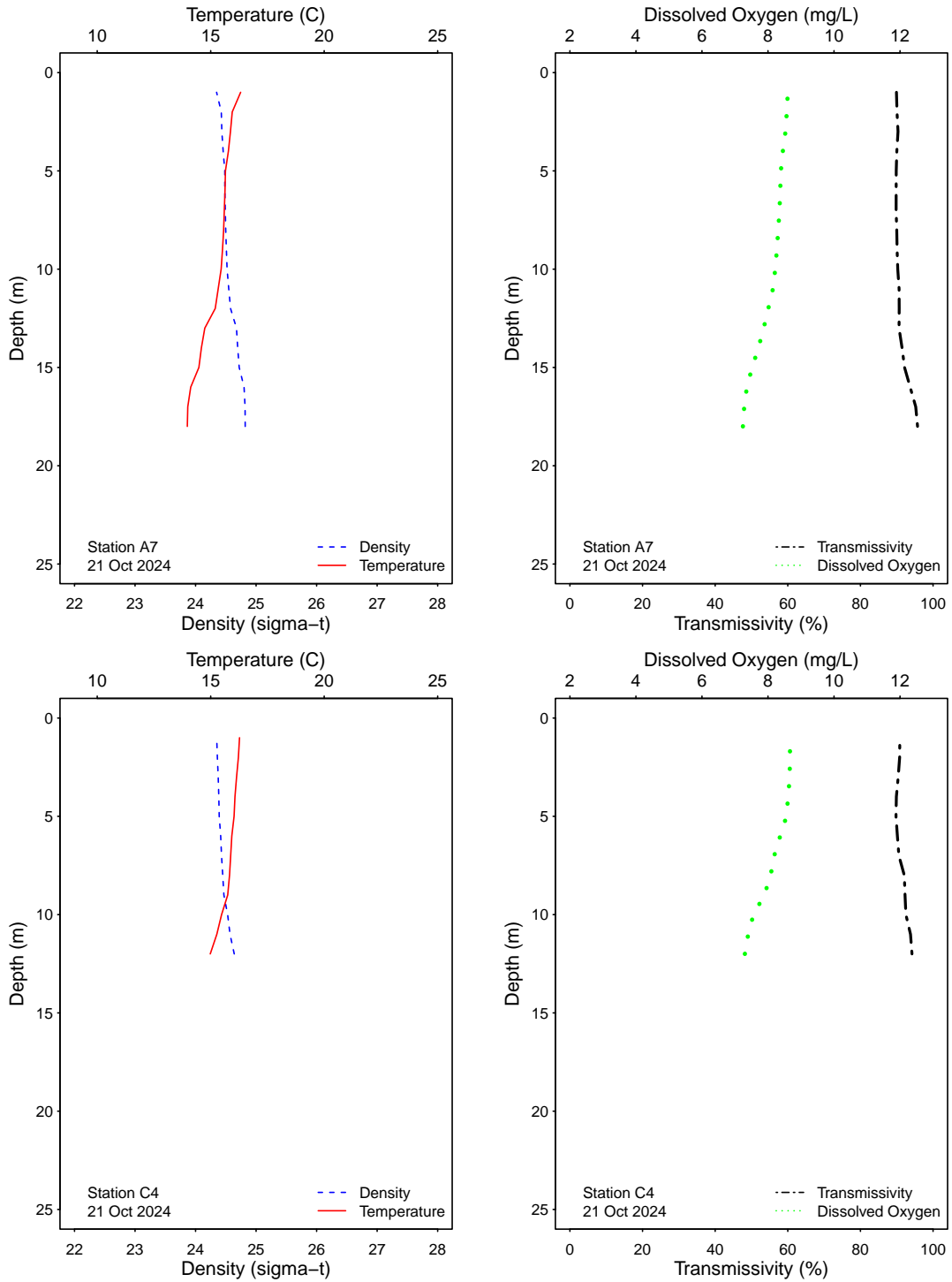


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

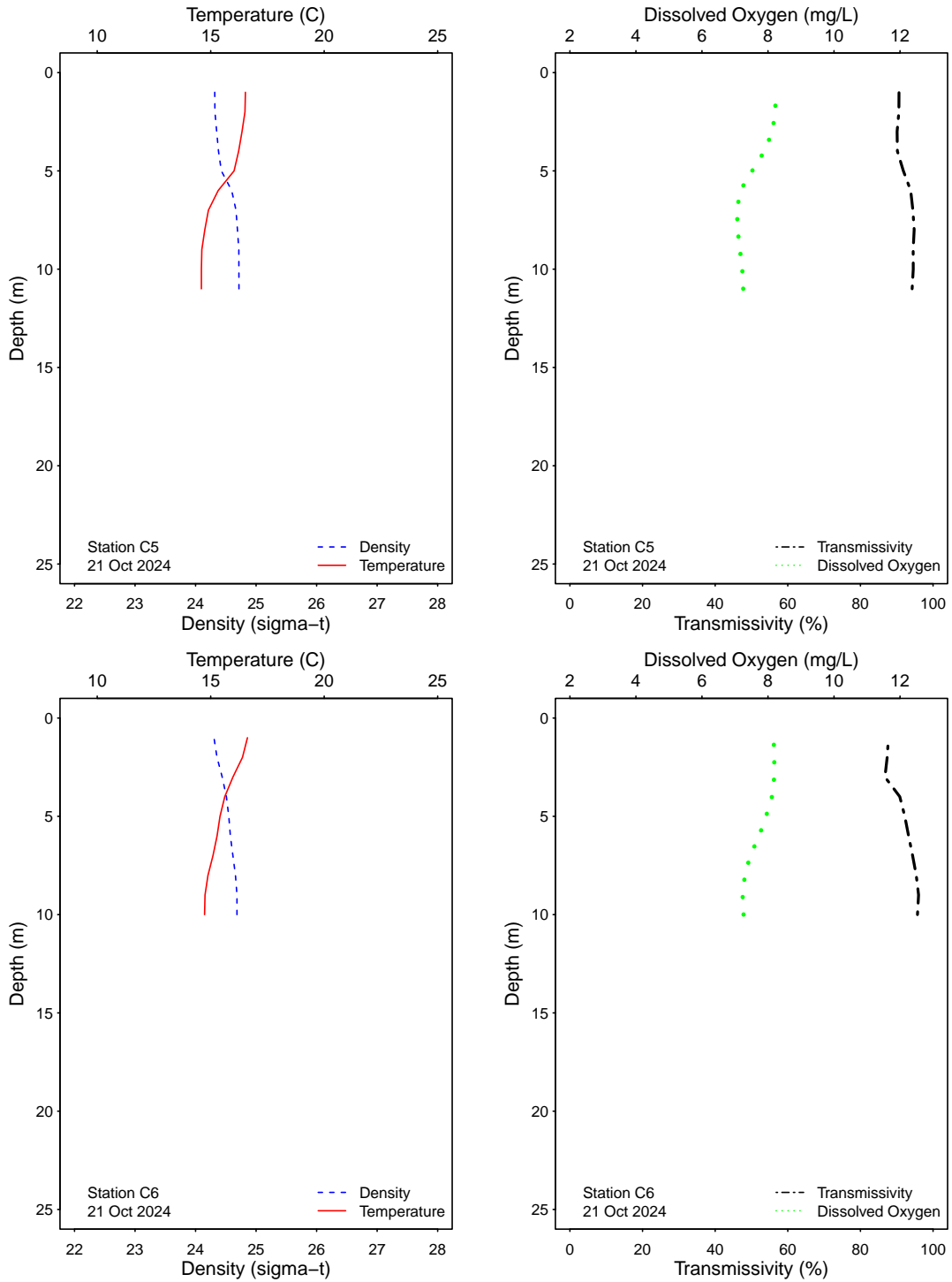


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

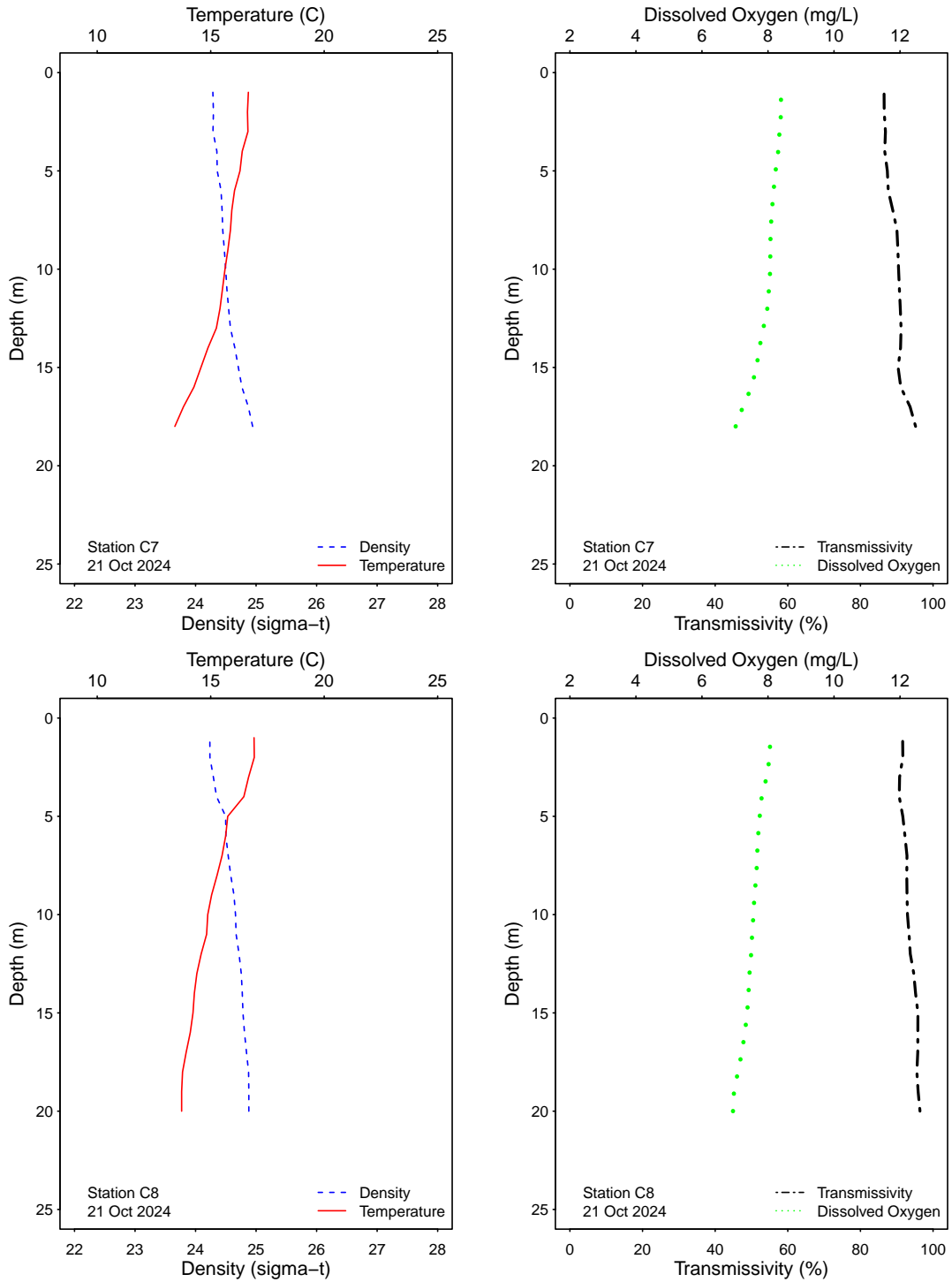


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

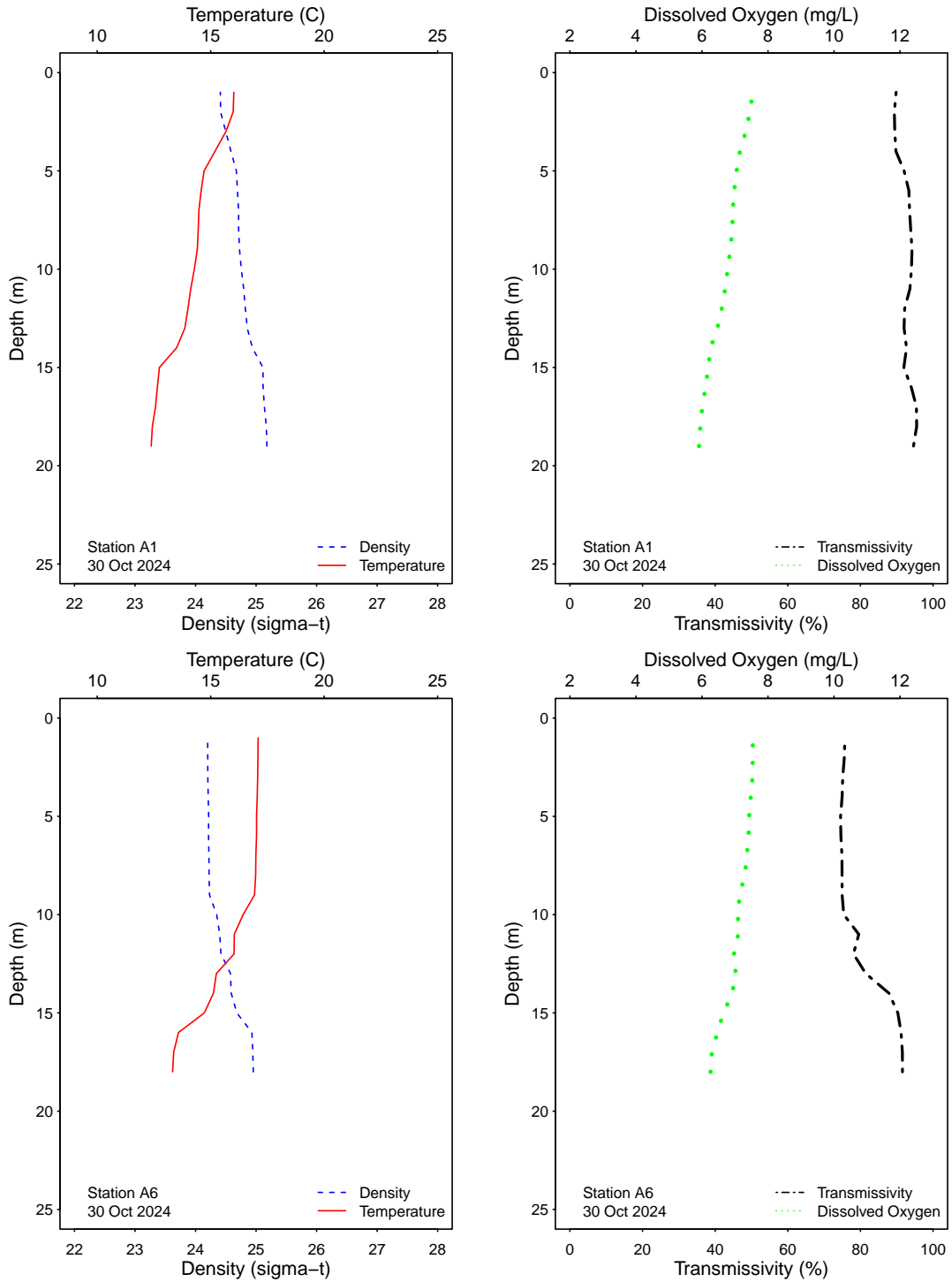


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

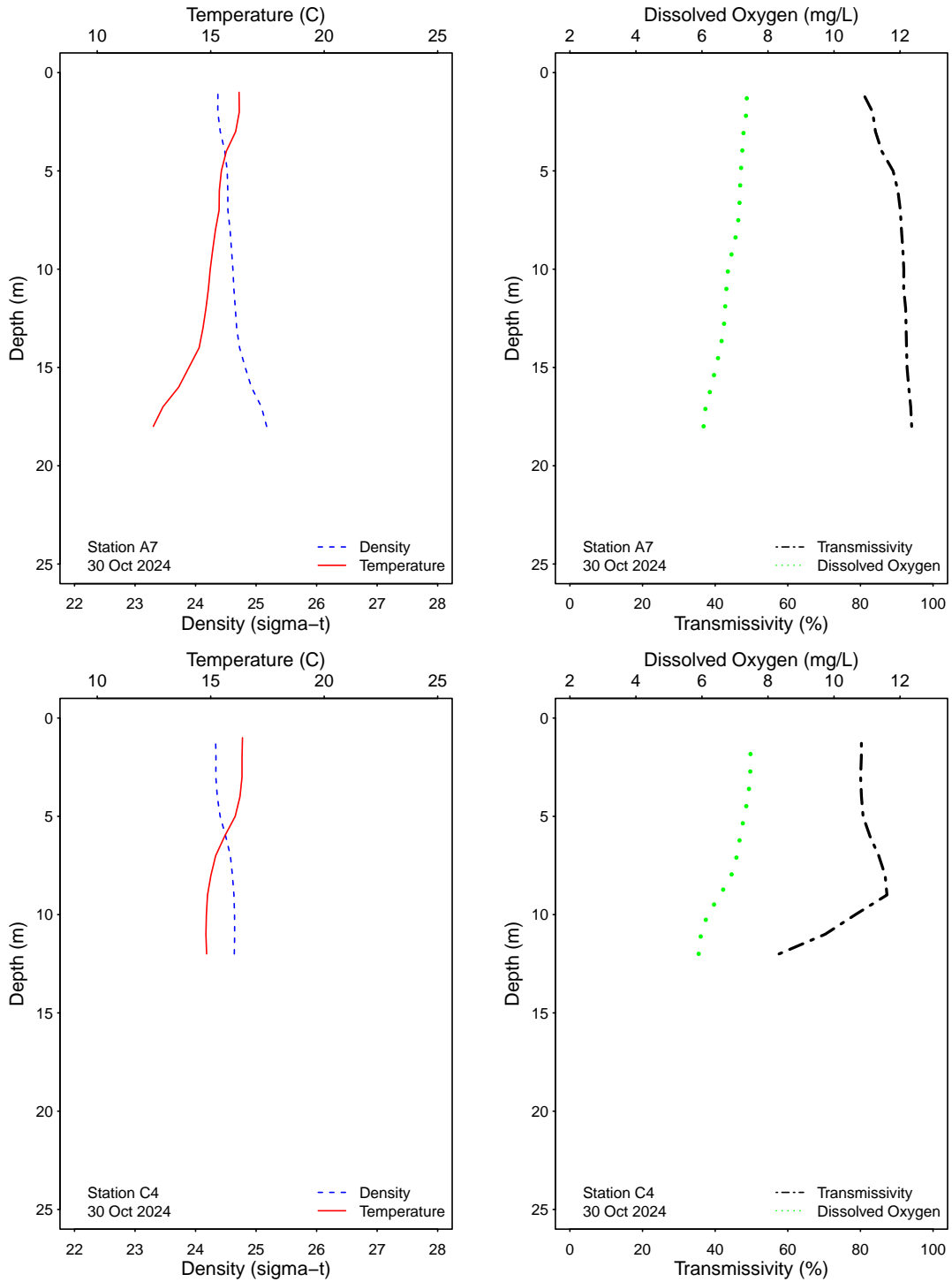


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

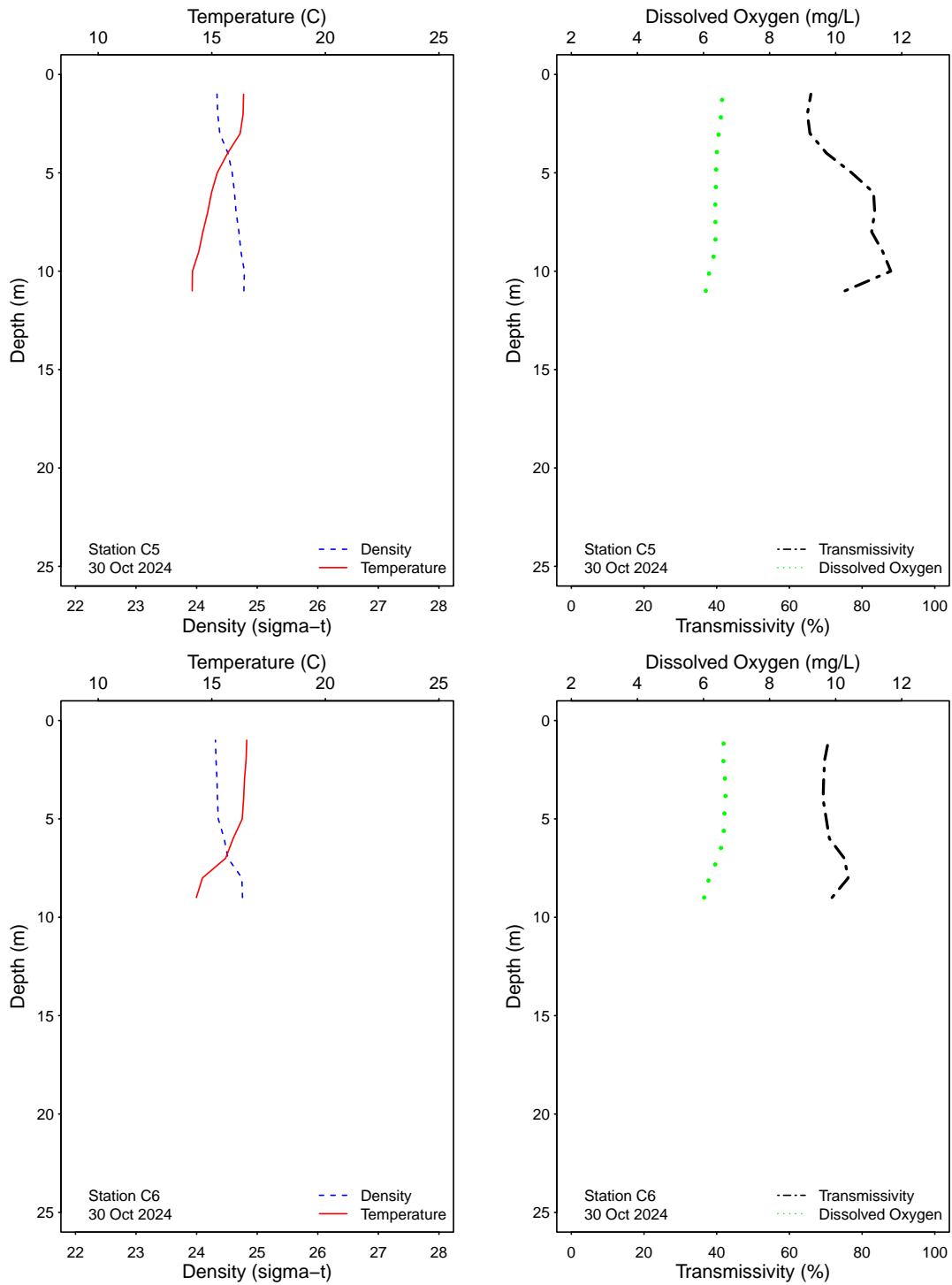


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

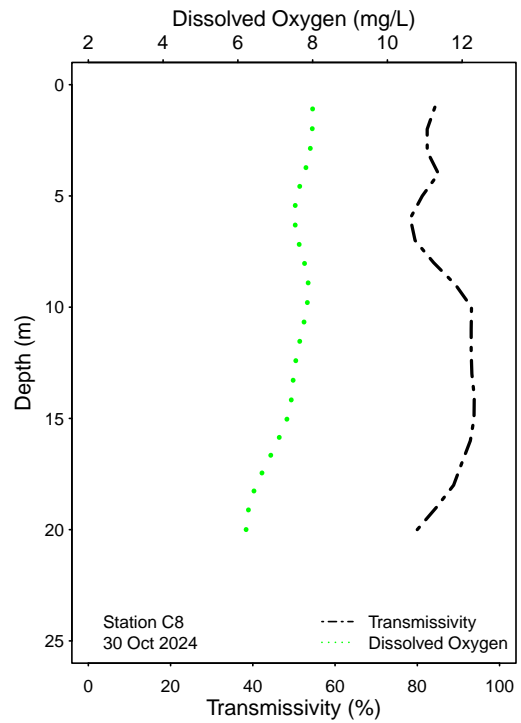
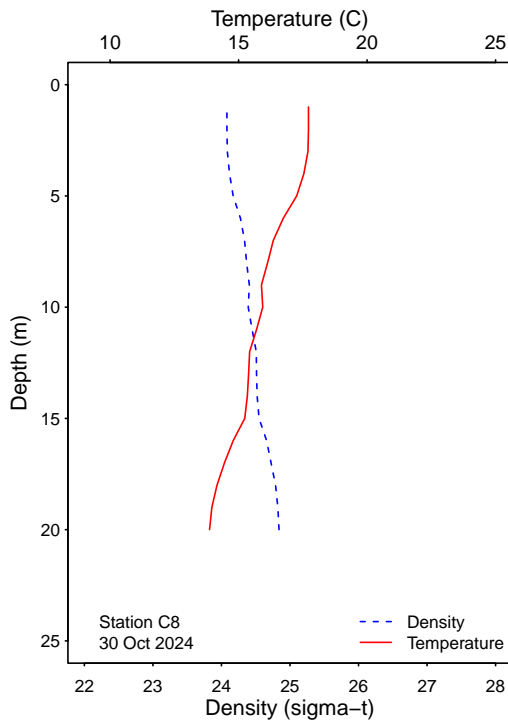
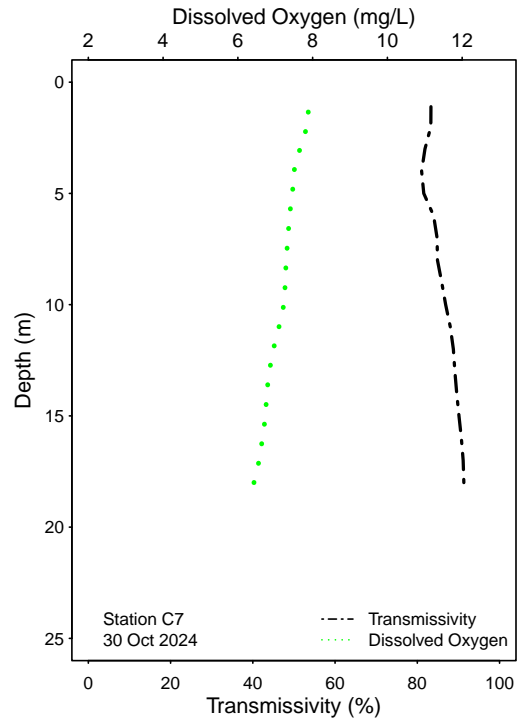
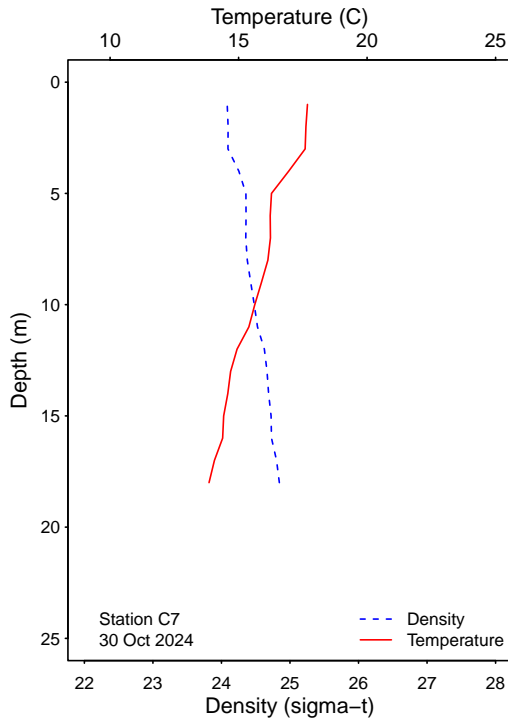


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

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APPENDIX A

Quality Assurance

Table A.1

Summary of bacteriological quality assurance field and lab duplicate sample analyses at selected PLOO stations. Densities of total coliform (Total), fecal coliform (Fecal), and *Enterococcus* (Entero) are reported as CFU/100 mL.

Station	Date	Depth	Analyst	Procedure	Total	Fecal	Entero
A7	08 Oct 2024	18	KT	LAB DUPLICATE	100	28	4
A7	15 Oct 2024	18	JF	LAB DUPLICATE	18	8	2
A7	21 Oct 2024	18	JF	LAB DUPLICATE	8	2	2
A7	30 Oct 2024	18	ND	LAB DUPLICATE	100	40	4
C7	08 Oct 2024	18	KT	LAB DUPLICATE	2	2	2
C7	15 Oct 2024	18	JF	LAB DUPLICATE	18	2	2
C7	21 Oct 2024	18	JF	LAB DUPLICATE	4	2	2
C7	30 Oct 2024	18	ND	LAB DUPLICATE	2	2	2
C8	08 Oct 2024	12	KT	LAB DUPLICATE	2	2	2
C8	15 Oct 2024	12	JF	LAB DUPLICATE	2	2	2
C8	21 Oct 2024	12	JF	LAB DUPLICATE	2	2	2
C8	30 Oct 2024	12	ND	LAB DUPLICATE	2	2	2
D12	02 Oct 2024		ADG	LAB DUPLICATE	2	2	2
D12	02 Oct 2024		ADG	FIELD DUPLICATE	2	2	2
D12	09 Oct 2024		JF	FIELD DUPLICATE	20	20	2
D12	09 Oct 2024		JF	LAB DUPLICATE	20	6	4
D12	16 Oct 2024		ADG	LAB DUPLICATE	200	2	10
D12	16 Oct 2024		ADG	FIELD DUPLICATE	200	2	20
D12	23 Oct 2024		ND	FIELD DUPLICATE	4	2	2
D12	23 Oct 2024		ND	LAB DUPLICATE	2	2	4
D12	30 Oct 2024		KA	LAB DUPLICATE	200	2	2
D12	30 Oct 2024		KA	FIELD DUPLICATE	200	2	2

ns = not sampled

ND = no data

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APPENDIX B

New 2019 Ocean Plan
Water Quality Objectives

Shore Stations

Table B.1

Summary of compliance with the Ocean Plan’s 6-week Geometric Mean standard for *Enterococcus* at the PLOO shore stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 6 weeks unless otherwise noted (*). Values >30 CFU/100 mL exceed the standard.

Date	D4	D5	D7	D8-B	D9	D10	D11	D12
01 Oct 2024	2	2	2	3	2	3	6	3
02 Oct 2024	2	2	3	3	2	5	4	3
03 Oct 2024	2	2	3	3	2	5	4	3
04 Oct 2024	2	2	3	3	2	5	4	3
05 Oct 2024	2	2	3	3	2	5	4	3
06 Oct 2024	2	2	3	3	2	5	4	3
07 Oct 2024	2	2	3	3	2	5	4	3
08 Oct 2024	2	2	3	3	2	5	4	3
09 Oct 2024	2	2	4	4	2	7	4	2
10 Oct 2024	2	2	4	4	2	7	4	2
11 Oct 2024	2	2	4	4	2	7	4	2
12 Oct 2024	2	2	4	4	2	7	4	2
13 Oct 2024	2	2	4	4	2	7	4	2
14 Oct 2024	2	2	4	4	2	7	4	2
15 Oct 2024	2	2	4	4	2	7	4	2
16 Oct 2024	2	2	7	7	3	10	5	3
17 Oct 2024	2	2	7	7	3	10	5	3
18 Oct 2024	2	2	7	7	3	10	5	3
19 Oct 2024	2	2	7	7	3	10	5	3
20 Oct 2024	2	2	7	7	3	10	5	3
21 Oct 2024	2	2	7	7	3	10	5	3
22 Oct 2024	2	2	7	7	3	10	5	3
23 Oct 2024	2	2	7	7	3	10	5	3
24 Oct 2024	2	2	7	7	3	10	5	3
25 Oct 2024	2	2	7	7	3	10	5	3
26 Oct 2024	2	2	7	7	3	10	5	3
27 Oct 2024	2	2	7	7	3	10	5	3
28 Oct 2024	2	2	7	7	3	10	5	3
29 Oct 2024	2	2	7	7	3	10	5	3
30 Oct 2024	2	3	9	5	3	10	4	3
31 Oct 2024	2	3	9	5	3	10	4	3

* Geometric mean calculated using n<5

Table B.2

Summary of compliance at the PLOO shore stations with the Ocean Plan's Statistical Threshold Value standard for *Enterococcus* bacteria, which states that *Enterococcus* density shall not exceed 110 CFU/100 mL in more than 10% of samples per month.

Date	D4	D5	D7	D8-B	D9	D10	D11	D12
October	IC	IC	IC	IC	IC	E	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table B.3

Summary of compliance with the Ocean Plan's 30-day Median standard for total coliform bacteria at the PLOO shore stations. Data are based on the median of the five most recent samples from each site over the previous 30 days unless otherwise noted (*). Values >70 CFU/100 mL exceed the standard.

Date	D4	D5	D7	D8-B	D9	D10	D11	D12
01 Oct 2024	*200	*200	*20	*130	*20	*60	*30	*50
02 Oct 2024	200	200	20	60	20	100	20	20
03 Oct 2024	200	200	20	60	20	100	20	20
04 Oct 2024	*200	*110	*20	*50	*20	*60	*20	*20
05 Oct 2024	*200	*110	*20	*50	*20	*60	*20	*20
06 Oct 2024	*200	*110	*20	*50	*20	*60	*20	*20
07 Oct 2024	*200	*110	*20	*50	*20	*60	*20	*20
08 Oct 2024	*200	*110	*20	*50	*20	*60	*20	*20
09 Oct 2024	200	200	20	60	20	100	20	20
10 Oct 2024	200	200	20	60	20	100	20	20
11 Oct 2024	*200	*110	*110	*130	*40	*150	*30	*20
12 Oct 2024	*200	*110	*110	*130	*40	*150	*30	*20
13 Oct 2024	*200	*110	*110	*130	*40	*150	*30	*20
14 Oct 2024	*200	*110	*110	*130	*40	*150	*30	*20
15 Oct 2024	*200	*110	*110	*130	*40	*150	*30	*20
16 Oct 2024	200	200	200	200	60	200	40	20
17 Oct 2024	200	200	200	200	60	200	40	20
18 Oct 2024	*200	*110	*300	*130	*130	*200	*120	*20
19 Oct 2024	*200	*110	*300	*130	*130	*200	*120	*20
20 Oct 2024	*200	*110	*300	*130	*130	*200	*120	*20
21 Oct 2024	*200	*110	*300	*130	*130	*200	*120	*20
22 Oct 2024	*200	*110	*300	*130	*130	*200	*120	*20
23 Oct 2024	200	200	200	200	60	200	40	20
24 Oct 2024	200	200	200	200	60	200	40	20
25 Oct 2024	200	200	200	200	60	200	40	20
26 Oct 2024	*200	*200	*300	*200	*130	*200	*110	*20
27 Oct 2024	*200	*200	*300	*200	*130	*200	*110	*20
28 Oct 2024	*200	*200	*300	*200	*130	*200	*110	*20
29 Oct 2024	*200	*200	*300	*200	*130	*200	*110	*20
30 Oct 2024	200	200	200	200	60	200	20	20
31 Oct 2024	200	200	200	200	60	200	20	20

* Median calculated using n<5

Table B.4

Summary of compliance at the PLOO shore stations with the Ocean Plan's Statistical Threshold Value for total coliform bacteria, which states that total coliform density shall not exceed 230 CFU/100 mL in more than 10% of samples per station, per month.

Date	D4	D5	D7	D8-B	D9	D10	D11	D12
October	IC	IC	E	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Kelp Stations

Table B.5

Summary of compliance with the Ocean Plan's 6-week Geometric Mean standard for *Enterococcus* at the PLOO shore stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 6 weeks unless otherwise noted (*). Values >30 CFU/100 mL exceed the standard.

Date	A1	A6	A7	C4	C5	C6	C7	C8
01 Oct 2024	2	2	2	2	2	2	2	3
02 Oct 2024	2	2	2	2	2	2	2	3
03 Oct 2024	2	2	2	2	2	2	2	3
04 Oct 2024	2	2	2	2	2	2	2	3
05 Oct 2024	2	2	2	2	2	2	2	3
06 Oct 2024	2	2	2	2	2	2	2	3
07 Oct 2024	2	2	2	2	2	2	2	3
08 Oct 2024	2	2	2	2	2	2	2	3
09 Oct 2024	2	2	2	2	2	2	2	3
10 Oct 2024	2	2	2	2	2	2	2	3
11 Oct 2024	2	2	2	2	2	2	2	3
12 Oct 2024	2	2	2	2	2	2	2	3
13 Oct 2024	2	2	2	2	2	2	2	3
14 Oct 2024	2	2	2	2	2	2	2	3
15 Oct 2024	2	2	2	2	2	2	2	3
16 Oct 2024	2	2	2	2	2	2	2	3
17 Oct 2024	2	2	2	2	2	2	2	3
18 Oct 2024	2	2	2	2	2	2	2	3
19 Oct 2024	2	2	2	2	2	2	2	3
20 Oct 2024	2	2	2	2	2	2	2	3
21 Oct 2024	2	2	2	2	2	2	2	2
22 Oct 2024	2	2	2	2	2	2	2	3
23 Oct 2024	2	2	2	2	2	2	2	3
24 Oct 2024	2	2	2	2	2	2	2	3
25 Oct 2024	2	2	2	2	2	2	2	3
26 Oct 2024	2	2	2	2	2	2	2	3
27 Oct 2024	2	2	2	2	2	2	2	3
28 Oct 2024	2	2	2	2	2	2	2	3
29 Oct 2024	2	2	2	2	2	2	2	2
30 Oct 2024	2	2	2	2	2	2	2	2
31 Oct 2024	2	2	2	2	2	2	2	2

* Geometric mean calculated using n<5

Table B.6

Summary of compliance at the PLOO shore stations with the Ocean Plan's Statistical Threshold Value standard for *Enterococcus* bacteria, which states that *Enterococcus* density shall not exceed 110 CFU/100 mL in more than 10% of samples per month.

Date	A1	A6	A7	C4	C5	C6	C7	C8
October	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table B.7

Summary of compliance with the Ocean Plan's 30-day Median¹¹ standard for total coliform bacteria at the PLOO kelp stations. Data are based on the median of the five most recent samples from each site over the previous 30 days unless otherwise noted (*). Values >70 CFU/100 mL exceed the standard.

Date	A1			A6			A7			C4			C5			C6			C7			C8		
	1m	12m	18m	1m	12m	18m	1m	12m	18m	1m	3m	9m	1m	3m	9m	1m	3m	9m	1m	12m	18m	1m	12m	18m
01 Oct 2024	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	10	6	2	20	2	2	2	2	2
02 Oct 2024	2	2	2	2	6	2	2	2	2	2	2	2	2	2	2	10	6	2	20	2	2	2	2	2
03 Oct 2024	*2	*2	*2	*2	*4	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*15	*4	*2	*11	*3	*2	*2	*2	*2
04 Oct 2024	*2	*2	*2	*2	*4	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*15	*4	*2	*11	*3	*2	*2	*2	*2
05 Oct 2024	*2	*2	*2	*2	*4	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*15	*4	*2	*11	*3	*2	*2	*2	*2
06 Oct 2024	*2	*2	*2	*2	*4	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*15	*4	*2	*11	*3	*2	*2	*2	*2
07 Oct 2024	*2	*2	*2	*2	*4	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*15	*4	*2	*11	*3	*2	*2	*2	*2
08 Oct 2024	2	2	2	2	6	2	2	2	2	2	2	2	2	2	2	10	2	2	2	2	2	2	2	2
09 Oct 2024	2	2	2	2	6	2	2	2	2	2	2	2	2	2	2	10	2	2	2	2	2	2	2	2
10 Oct 2024	*2	*2	*11	*2	*13	*25	*2	*4	*2	*2	*2	*2	*2	*2	*15	*4	*2	*11	*3	*2	*2	*2	*2	*2
11 Oct 2024	*2	*2	*11	*2	*13	*25	*2	*4	*2	*2	*2	*2	*2	*2	*15	*4	*2	*11	*3	*2	*2	*2	*2	*2
12 Oct 2024	*2	*2	*11	*2	*13	*25	*2	*4	*2	*2	*2	*2	*2	*2	*15	*4	*2	*11	*3	*2	*2	*2	*2	*2
13 Oct 2024	*2	*2	*11	*2	*13	*25	*2	*4	*2	*2	*2	*2	*2	*2	*15	*4	*2	*11	*3	*2	*2	*2	*2	*2
14 Oct 2024	*2	*2	*11	*2	*13	*25	*2	*4	*2	*2	*2	*2	*2	*2	*15	*4	*2	*11	*3	*2	*2	*2	*2	*2
15 Oct 2024	2	2	20	2	6	20	2	6	20	2	2	2	2	2	2	10	2	2	2	2	2	2	2	2
16 Oct 2024	2	2	20	2	6	20	2	6	20	2	2	2	2	2	2	10	2	2	2	2	2	2	2	2
17 Oct 2024	*2	*6	*50	*2	*13	*34	*2	*7	*21	*2	*2	*2	*2	*2	*6	*2	*2	*2	*3	*4	*2	*2	*2	*2
18 Oct 2024	*2	*6	*50	*2	*13	*34	*2	*7	*21	*2	*2	*2	*2	*2	*6	*2	*2	*2	*3	*4	*2	*2	*2	*2
19 Oct 2024	*2	*6	*50	*2	*13	*34	*2	*7	*21	*2	*2	*2	*2	*2	*6	*2	*2	*2	*3	*4	*2	*2	*2	*2
20 Oct 2024	*2	*6	*50	*2	*13	*34	*2	*7	*21	*2	*2	*2	*2	*2	*6	*2	*2	*2	*3	*4	*2	*2	*2	*2
21 Oct 2024	2	2	20	2	6	20	2	6	14	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
22 Oct 2024	2	2	20	2	6	20	2	6	14	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
23 Oct 2024	2	2	20	2	6	20	2	6	14	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
24 Oct 2024	*2	*6	*50	*2	*13	*34	*2	*7	*21	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*4	*2	*2	*2	*2
25 Oct 2024	*2	*6	*50	*2	*13	*34	*2	*7	*21	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*4	*2	*2	*2	*2
26 Oct 2024	*2	*6	*50	*2	*13	*34	*2	*7	*21	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*4	*2	*2	*2	*2
27 Oct 2024	*2	*6	*50	*2	*13	*34	*2	*7	*21	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*4	*2	*2	*2	*2
28 Oct 2024	*2	*6	*50	*2	*13	*34	*2	*7	*21	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*4	*2	*2	*2	*2
29 Oct 2024	*2	*6	*50	*2	*13	*34	*2	*7	*21	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*4	*2	*2	*2	*2
30 Oct 2024	*2	*6	*51	*2	*4	*14	*2	*5	*74	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*3	*2	*2	*2	*2
31 Oct 2024	*2	*6	*51	*2	*4	*14	*2	*5	*74	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*3	*2	*2	*2	*2

* Median calculated using n<5

Table B.8

Summary of compliance at the PLOO kelp stations with the Ocean Plan's Statistical Threshold Value for total coliform bacteria, which states that total coliform density shall not exceed 230 CFU/100 mL in more than 10

Date	A1		A6		A7		C4		C5		C6		C7		C8		
	1m	18m	1m	12m	18m	1m	3m	9m	1m	3m	9m	1m	12m	18m	1m	12m	18m
October	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance
 E = Exceedance
 ns = not sampled
 ND = no data